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Adventurous Railroading and Rail Hobbies—Founded 1906

VOL. 92 No. 4 FEBRUARY, 1973 75 CENTS

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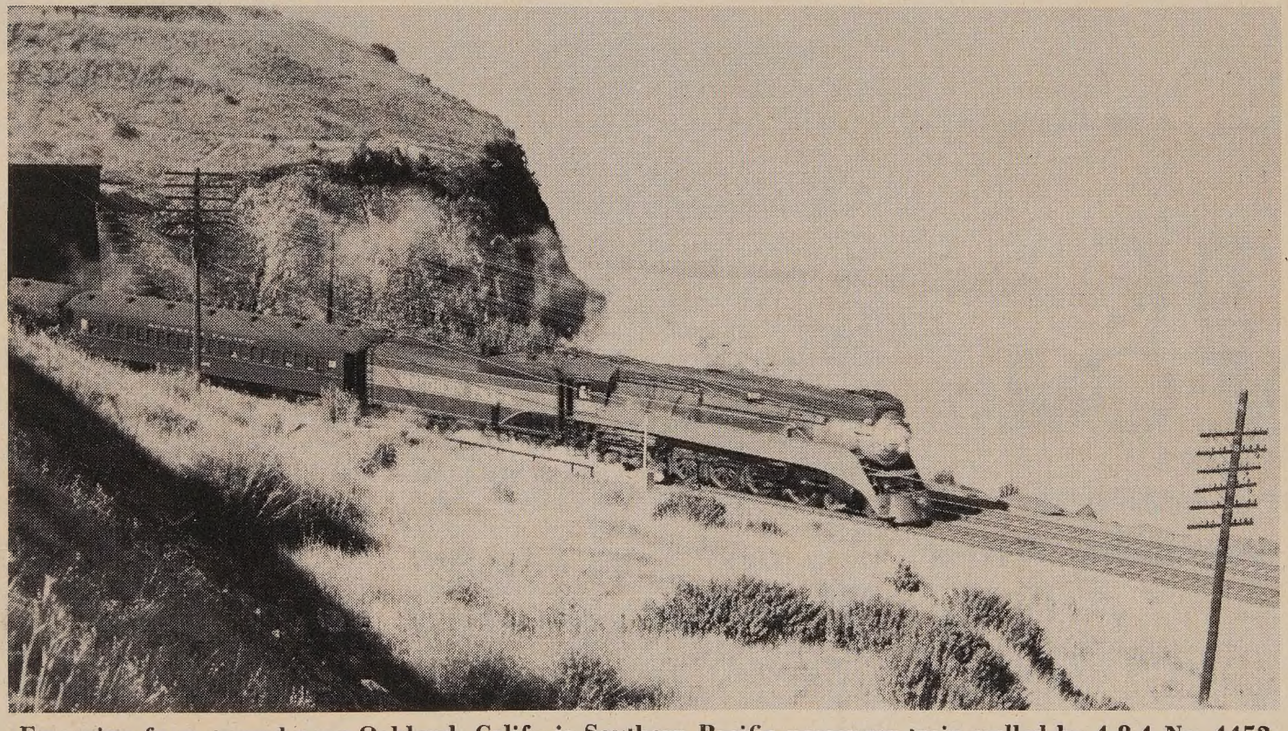

Emerging from tunnel near Oakland, Calif., is Southern Pacific passenger train pulled by 4-8-4 No. 4452.
From R. L. Borcherding negative in Jim Seacrest collection

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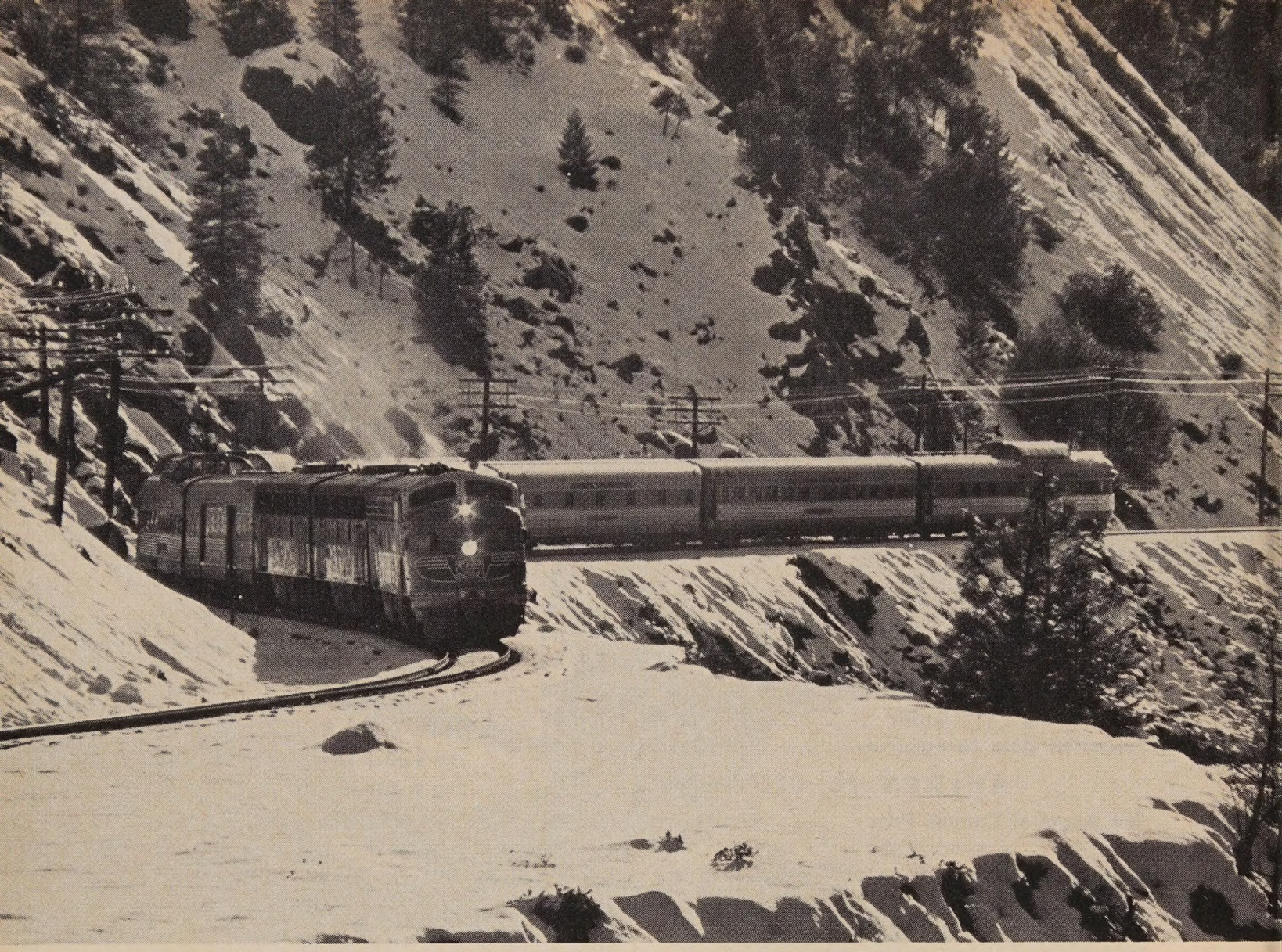


Western Pacific F-7 804-A blasts a short *California Zephyr* of 9 cars eastbound up Feather River Canyon in February '68.
Robert L. Hogan, 2250 Pelham Place, Oakland, Calif. 94611

THE MAIL CAR

where editors and readers meet

OUR cover painting by George M. Lewis, 4535 Fran Way, Richmond, Calif. 94803, shows one of his favorite trains, *The 400,* Chicago & North Western, roaring through a Chicago suburb on a late winter afternoon about 40 years ago. Note the old-style Mars headlight. George's railroading interest dates from his early boyhood in Oak Park, Illinois, where he often watched trains running side by side on the C&NW and the Lake Street elevated right-of-way. His present occupation is designing Dennison tags, labels, and packaging. ●

WHISTLE-STOP. Even without the help of President Kennedy's widow, the Rhode Island Democratic Senator Claiborne Pell, friend of the railroads, was re-elected to the Senate last November 7th. Mrs. Jacqueline Onassis had been scheduled to join him on a whistle-stop train tour of his state. But the former First Lady decided that such political activity might be detrimental to her lawsuit in the Ron Gallela case, Ron being a New York photographer whose picture-taking aroused Jackie's ire; and the train tour was cancelled.

Furthermore, for the first time since 1896, when William Jennings Bryan logged 18,000 miles vainly preaching his free silver doctrine from rear platforms, not a single nominee for national office took to the rails in 1972 to exhort voters.

Totally missing last fall were enthusiastic gatherings of citizens and high-school bands outside bunting-draped depots, and the ground-level views of countrysides in harvest-time with an occasional well-wisher waving to the campaign special.

According to a study by the Smithsonian Institution, whistle-stopping began in the 1880's when candidates traveling by train between speaking dates discovered that they could make a little extra political hay by addressing travelers at station stops.

After Bryan had rigged out his special in 1896, the technique came into general campaign use. President Woodrow Wilson even had a special outfitted so he could crusade—vainly—to mobilize pressure on the Senate for ratification of the Treaty of Versailles. While on the tour in September, 1919, he collapsed from exhaustion in Colorado.

But Abraham Lincoln, in 1860, was the first President to ride the rails in a national election campaign. ●

READERS' COMMENTS. The number of responses to my query about "'DF" boxcars in *Railroad Magazine* last September surprised and pleased me. Bud Crouch, project engineer for Evans Product Co., Plymouth, Mich., explained that the letters "DF," "DF-2," and "DF-b" (all meaning "Damage-

Free") are Evans trademarks on boxcars equipped with Evans interior freight protection equipment. "DF" and "DF-2" apply to adjustable bulkheads built within boxcars to keep freight from shifting in transit. "DF-b" denotes boxcars equipped with large moveable bulkheads the height and width of the car which can be swung and locked into position, also to keep freight stationary, and then swung back out of the way for unloading.—R.J. Hughes, 20 Woodland Park, Rochester, N.Y. 14610.

That comment on the new TV-equipped armchairs in Euston Station, London, England, in your December issue reminds me that a year and a half ago I saw such equipment in the Canadian National Central Station in Montreal, and the same may be seen also in some airports.—Jim Shaughnessy, author of *Delaware & Hudson,* 479 8th Ave., Troy, N.Y. 12182.

With regard to B.L. Dockstall's letter on delivering train orders (Nov. '72), let me says that rules are different on various railroads. On the Burlington Northern, for example, 3-position order boards are common. A stop position there indicates a stop for orders. The "19" position, diagonally (like a block signal displaying "approach"), indicates proceed, being governed by orders received at the station. In other words, the operator has orders for your train. But they do not restrict the train, so they are delivered on the fly under a "19" board. The clear position means, of course, no orders. A major exception to the above is that when a train is required by special instruction or other authority to get a clearance at a depot, orders may be delivered to such train without first having to display the train-order signal. In that case the board may be left in the clear position.—Dean Ogle, 104-1230 Fifth Ave., New Westminster, B.C., Canada.

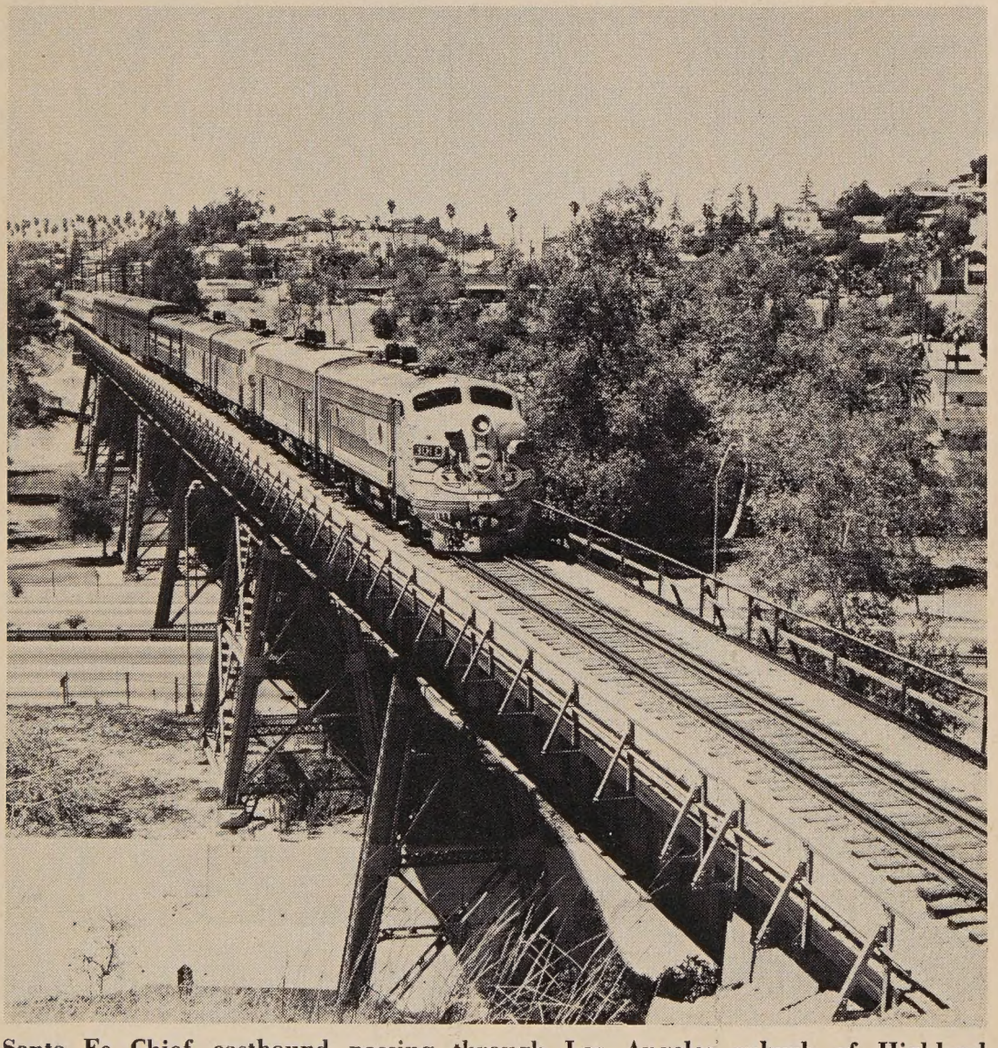
I like especially your *Interesting Railfans* series, many of your photos (especially those of the railroads' better days), and your full-color covers. I dislike your occasional typographical errors, your rail-girl pix, your fiction stories, and your pictures in which little action or documentation is evident. —Bob Paval, 5676 Broadview Rd. #124, Parma, Ohio 44134.

You slipped up in the November issue by saying the Mexican Government planned to build a railroad from Coatzacoalco on the Gulf of Mexico to Salina Cruz on the Pacific Ocean. That line was built long ago.—Max A. Heinzman, 1137 Heather Sq., Pasadena, California 91104.

To save wear and tear on the pretty legs of their boarding hostesses, AutoTrain has provided roller skates for use on long station platform in Sanford, Fla. Here, one of the hostesses, Brenda Griggs, rolls along on a beautiful Sept. day in 1972.
William T. Morgan, P.O. Box 6863, Ft. Myers, Fla. 33902

The Laramie, North Park & Western is a small branch line of the Union Pacific. Running from Laramie, Wyo., to Welden, Colo., you can still find traces of the past all along the pike. Two trains a day pass old station at Centennial, Wyo.
Mark Dodds, 1016 Bloomdale, Las Cruces, N.M. 88001

Canadian National Railway 4-8-4 No. 6218 arriving St. Hyacinthe, Quebec, on her final run in Province, June 27, 1971. The 6218 was a railfan favorite.
H. A. McCourt, P.O. Box 1012, Richmond, Quebec, Canada



Santa Fe Chief eastbound passing through Los Angeles suburb of Highland Park crosses Arroyo Seco River, midway between L.A. depot and Pasadena.
Gary G. Allen, 215½ East Palmer Ave., Glendale, Calif. 91205

Bob Bruhin asked in the December *Mail Car* what I would have done, back in my active days as a boomer hogger, if I had met a young female "switchman" at work in a railroad yard. Well, if she were flagging me down, I would have answered with two or three toots and followed her orders. But if she were calling me to back into a spur leading into a hobo jungle, I would have asked her what the game was.—E.A. "Frog" Smith, 99 E. Mariana St., North Ft. Myers., Fla. 33903. ●

PERSONALITIES. According to rail lingo, when a railroad man retires he is "given the rocking chair." Instead of a rocking chair, however, engineer Lon Powell of Birmingham, Ala., was presented with a lounge chair by fellow employes after he had made his last run. During his 49 years with the Seaboard Coast Line the engines Lon handled never caused personal injury—a record he is proud of.

In writing up Harry Christiansen as our Nov. '72 *Interesting Railfan* we asked if any other railbuffs were also bus enthusiasts. "Yes," replies *Interesting Railfan* 33, Francis A. Guido, editor and publisher of *The Western Railroader,* P.O. Box 668, San Mateo, Calif. 94401. "While attending Law School (1942-'45) I worked as a bus driver and took pictures of the various buses I operated. Since then, I have photographed buses on my rail travels, recently in six cities of Alaska. The largest charter bus setup in the San Francisco Bay Area was owned by railbuffs Bill Billings, Warren Miller, and one of your *Interesting Railfans,* Art Lloyd." (Changing the subject, *Interesting Railfan* Gary G. Allen, who made our current front cover, is a truck driver.)

Edmond Ansley, a tiny man who used to be a railroad callboy, is dead at 84. For 27 years he crisscrossed the country by rail, handing out free candy to local kids (which, incidentally, helped to make cavities in their teeth) and clowning with them to sell Buster Brown shoes. For that reason he was known to millions of youngsters as "Buster Brown," the name of a popular character in Sunday newspaper comics in the old days.

Charles Heseltine of South Portland, Me., has written a history of the Aroostook Valley Railroad and the Seashore Trolley Museum, which will be published as a booklet by O.R. Cummings, 105 Theresa Court, Manchester, N.H. 03103. The publisher needs illustrations such as photos of the AVR, especially in its electric days, also tickets, timetables, etc. Full credit will

be given for all contributions, whether loaned or donated.

Two unidentified crew men from a Lehigh Valley freight train made a sensational rescue the other day at Le Roy, N.Y. An automobile containing only Kimberli Knickerbocker, age six, and his baby brother Daryl ran away and fell about 12 feet onto to a narrow rock ledge above a 70-foot quarry. Hearing screams, the railroaders scrambled down to the ledge and saved the terrified kids.

Death has come to Mrs. Mary M. Gifford, age 87, the only watchwoman every employed by the Baltimore & Ohio. She served at the same crossing in Terra Alta, Md., for 37 years.

For 47 years engineers on the Indiana Harbor Belt Railroad thought they were "seeing double", but what they actually saw were twin brothers, Addison and Madison Hays. Not only alike in appearance, the twins followed identical careers. They went firing on the IHB at Blue Island, Ill., in 1925, were promoted together to the right side of the cab on Jan. 3, 1941, and both retired last July 25th.

Our account of Baldwin Locomotive Works in *The Editor's Waybill* (Dec. '72), writes William F. Rapp, editor of the Railroad Station Historical Society, 430 Ivy Ave., Crete, Neb. 68333, "reminds me that my father worked in the New York office of the Union Pacific and often visited the Baldwin plants in Philadelphia and Eddystone, Pa., in connection with the financial aspects of buying steam engines for his employer."

"Regarding your double-page photo, 'Switching Locos Named for Women' (Dec. '72), I recall living near the tracks of the Erie's Greenwood Lake branch as a small boy and I often saw a steam engine with the name *Harvey Springstead* painted on the cab just under the window. What did an engineer have to do to get his name painted on the cab?"—M.G. Fisk, Atti Engineering Corp., 108 36th St., Union City, N.J. 07087.

After 15 years of hunting, E. Ridolph of Hialeah, Fla., has joined the list of readers with unbroken files of *Railroad* dating back to December, 1929. "The effort to collect these magazines was worthwhile," he writes, "for the wealth of material they contain."

"Although I have a nearly complete set of *Railroad Magazine* since December, 1929," says Jim Seacrest, 2101 Birchwood Rd., North Platte, Neb. 69101, "I'd like to see you rerun any Haywire Mac stories. They are timeless and I really enjoy them. 'Boomers, Northbound' (Dec. '72) interested me especially because when I worked for the CB&Q in Chicago years ago I spent some time nosing around the Western Avenue yard, which I understand is now abandoned, with tracks torn up. The other road Haywire Mac mentioned was a predecessor line of what is today the Duluth, Winnipeg & Pacific. Fort Gibson in the story is actually Fort Francis, served by the Canadian National, not the Canadian Pacific. I'd like to hear from oldtimers who worked on that line, for a book I'm doing." ●

A MAMMOTH track-repair train in the Soviet Union can rip up and fix a mile of rails and roadbed in four hours, which outmatches anything of its kind in the United States. So says John W. Ingram, Federal Railroad Administration chief, who visited Russia with American railroad experts.

"The Russians' approach to track maintenance is very simple," he explains. "The tracks are pulled up by magnets, cut up in pieces, and hauled to a place where they dry-clean it and press it, and then haul it back. The repair train stretches over a mile. It has about ten sections, some holding new rails, some picking up old, and a unit big as a couple of 100-ton tanks welded together forming the track ripper-upper.

"The train picks up ballast, shoots dirt out through high-pressure hoses, and lays down clean ballast. We are ahead on high-speed train operations. The Russians are ahead on track maintenance. This could be a basis for sitting down and solving problems together." ●

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Railroad went into effect Dec. 30, 1972, based on an agreement signed by top officials of Penn Central and the P&W, thus ending more than four years of court action, ICC disputes, and private dickering. P&W began service in 1846 and was operated under a lease by the New Haven Railroad and its predecessors from 1888 to 1968. PC took it over Jan. 1, 1969. It's on its own again.

For the second consecutive year, Santa Fe Railway is cited by National Safety Council for having the best employe safety record among the nation's major railroads who perform 40 million man-hours or more of work.

Penn Central is taking delivery of 50 new General Electric U23B mainline locomotives, making a total of 428 GE diesel-electrics in the PC fleet. All new ones will operate out of the area of Columbus, Ohio. The road serves 232 terminals in 16 states, the District of Columbia, and two Canadian provinces.

Jersey Central and the Southern Railway have inaugurated an all-piggyback service between Elizabeth, N.J., and Jacksonville, Fla., with two new trains, the *Florida Jet* and the *Manhattan Jet*.

The Green Bay & Western's 54-year-old business car, *The Roamer*, has passed out of that railroad's 103-year history of passenger service, and into an Ottawa, Ill., museum. It was once a Texas oil baron's private car, the former Prince of Wales' touring coach, a mining company's executive lodging and the GB&W business car, but was finally bought by railfan Thomas R. Hill.

Arthur Levitt, New York State comptroller, wants the Federal Government to pay municipal taxes now owed by bankrupt Penn Central. In a letter to the state's 43 Congressmen he noted that a court decision in the bankruptcy case has permitted PC to defer real property tax payments to localities. "I do not believe," he wrote, "that the taxpayers of an individual municipality should, in effect, subsidize railroad operations." He estimates the deferred railroad taxes in this state as slightly more than $10 million.

New York State, which owns and operates the Long Island Rail Road, will not be the only state in the railroad business if Francis W. Sargent, Governor of Massachusetts, can help. Mr. Sargent is asking two state agencies to consider financing the state purchase of 603 miles of railroad lines owned by the bankrupt Boston & Maine in Massachusetts. Under his plan the Massachusetts Bay Transportation Authority would take over those parts of the system needed for commuter service while the Massachusetts Port Authority would deal with freight.

A new train numbering system, designed to identify scheduled freight trains more explicitly and ultimately to automate and improve reporting of train information, went into effect on the Rock Island last September. The changes fall into two categories. First, train numbers were adjusted to reflect geographical areas of the railroad through which they operate. Secondly, certain code letters and numbers were added to the train numbers to produce a five-digit figure for utilization in reporting more detailed information to the computer.

A new "point-to-point" radio system —only one of its kind for CP Rail—is now in effect on the Revelstoke Division between Kamloops and Field, B.C. It gives dispatchers at Revelstoke direct voice contact for the first time with trains moving anywhere on the 250-mile division, with maintenance gangs along

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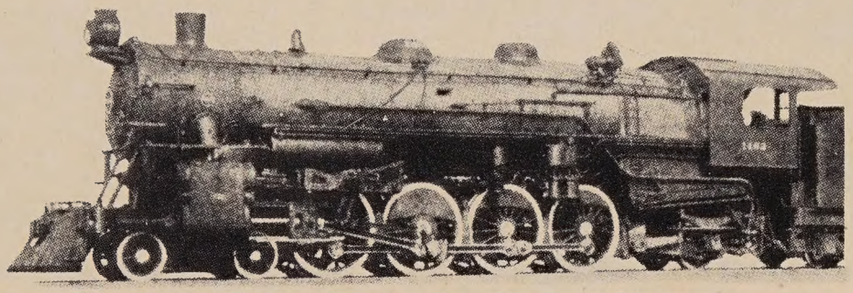

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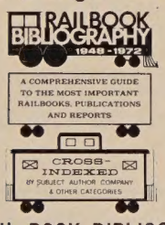

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the right-of-way, and with the railway's motor vehicles on adjacent highways.

Two cars of a westbound freight train jumped the tracks at the busy downtown station of the Jersey Central and Penn Central at Elizabeth, N.J., the other day and plowed into the depot, leveling the structure. Two persons inside the station were slightly hurt.

The Long Island Rail Road's 60-year-old parlor car *Jamaica* took its final journey the other day to its ultimate resting place in Wantagh, N.Y. The parlor car, recently retired from active service, was donated to the Wantagh Preservation Society for restoration. It is being displayed in front of the old Wantagh station. ●

THE BOXCAR, workhorse of the railroad and home for yesteryear's hobo, wanders today through a maze of confusion and disrepair. Battered and seldom repaired, they trundle into unexpected places and often don't show up where they are expected, reports a special investigating unit of the Commerce Committee of the House of Representatives. The panel laments conditions in the rail industry which foster lax and wasteful procedures for administering the freight car fleet.

"The financial condition of many carriers is so poor that maintenance and repairs seem to be funded on a day-to-day basis with whatever cash is left after interest payments are met," the investigators report.

The five-man subcommittee headed by full-committee chairman Harley O. Staggers (D-W. Va.) said Governmental regulation "compounds the inefficiencies of rail management with its own inefficiencies. Regulatory decisions are often deferred until an issue is no longer germane."

In a 13,600-word report, the panel says the Interstate Commerce Commission has "a distressingly inadequate number" of service agents—46—to patrol operations of the nation's entire rail system, including some 20,000 stations and yards. President Nixon's Office of Management and Budget has blocked efforts to fill new agent positions authorized by Congress, the report says. ●

OVERSEAS. Fire that broke out in the diner of a 15-car express train traveling through an 8-mile tunnel in Japan last November killed 29 persons, most of them choked by smoke inhalation. Another 679 victims were injured, 15 of them seriously. Almost 300 others made their way safely through the smoke. The train was en route from Osaka, south west of Tokyo, to northern Japan. The train crew donned gas masks and tried to put out the fire 2½ miles inside the tunnel, but they were forced back by flames.

Train service between Tel Aviv, Israel, and the Arab city of Gaza was resumed last November after an interruption that lasted nearly a quarter of a century. The tracks over which Israeli Railways renewed this service are part of an international line connecting Egypt with Lebanon and Syria via Palestine's Mediterranean coast.

It happened last November at Caserta, Italy, not in the American West a century ago. A passenger train plowed into a herd of buffalos that had strayed onto the tracks. The locomotive was derailed, a score of passengers were injured, and 20 buffalos perished.

Pope Paul VI said his 1972 Christmas midnight Mass before workers at a railway construction site 25 miles north of Rome, near Sant' Oreste, on a new rail line being built between Rome and Florence.

India has a new, air-conditioned, luxurious but low-cost express train. Riding a coach costs you only $16 between New Delhi and Bombay, 865 miles. Sleeping accommodations plus meals, $49. Another bargain in train rides is the $2.70 you would spend to travel first class for 190 miles in Peru between Lima and Huancayo—but the journey is slow, nine and a half hours. Leaving Lima, the train climbs 3 and 4 percent grades to Galera tunnel, 15,688 feet above sea level, the world's highest point on a standard-gage railroad. If lofty altitudes bother you, don't go, even though views from the coach windows are truly spectacular.

The world's worst train wreck happened Dec. 12, 1917, in Modane, France, where a derailment on a mountain side killed 543 persons.

Nationalized railways of Greece are gradually being modernized and narrow-gage lines standardized.

China's "do or die project to get a foothold in Africa" has raised Chinese popularity in Tanzania by "100 percent." So says the American official who heads the U.S. aid mission in Tanzania, Dr. William Green, about the 1100-mile railroad that will link Zambia's copper regions with Tanzania's main port and capital, Dar es Salaam, in southeastern Africa. This railroad is being built with about 15,000 Chinese workers.

Let's all move to Japan! The Japanese railroad system has just passed its 100th birthday. Its passenger fares— when adjusted for inflation—are only about one-twelfth what they were in 1872!

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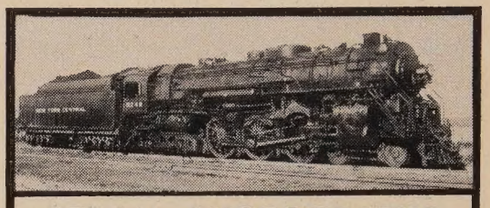

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P&WV 1102 (2-6-6-4)
UP 3953 (4-6-6-4)
WAB 614 (4-4-2)

- JIM ADAMS -
2405 W. McNICHOLS DETROIT, MICH 48221

U.S.A. and CANADA

DIESEL FLEET LISTINGS

as at October 31, 1972

CERTIFIED ACCURATE AT SOURCE

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British Rail's ferry service from Lymington to Yarmouth took quite a strain recently when the Isle of Wight received its first visit for some time of a circus. Transport difficulties are obviously increased when 50 vehicles and a large menagerie have to be moved across the water. But the Hoffmans Brothers, whose circus arrived at Yarmouth, obviously believe that the effort was worthwhile. Among the unusual passengers on the ferry were 30 horses, a herd of buffalo, 4 elephants, 14 lions, bears, monkeys, baboons. ●

IN SEARCH OF STEAM

Mike Eagleson

COLORADO CENTRAL narrow-gage is now rebuilding ex-Internacionales Ferrocarriles de Centro America 2-8-0 No. 40 for use on its excursion line. The diminutive Consolidation will join sister engine No. 44, which has been operating in excursion service for several years at Central City, Colorado.

SEVERAL readers have corrected an error sent in for my November '72 column. No. 233, an ancient 2-6-2T, is being repaired by the Pacific (not California Pacific) Locomotive Association, which is not connected with the Nevada Historical Society. The engine is ex-Southern Pacific 1903, previously SP 1504. Built in 1882 as No. 233 by the Central Pacific Railroad for its 7th Street commuter lines in Oakland, Calif., she was recently rebuilt as No. 233 by the Pacific Locomotive Association at its Castro Point Railway in Richmond, California.

WHO knows what became of the last Richmond, Fredericksburg & Potomac "Governor" type engine, class 4-8-4, reported to have been in boiler service intact at Brian Park Terminal as late as 1966? Who has a photo?

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ALASKA-YUKON CHAPTER NRHS
P.O. Box 2248, Anchorage, AK 99501

Reader Railroad, the nation's last non-tourist steam line, made its final regularly scheduled run on Dec. 2, 1972. Until its abandonment application is approved, it will operate only "irregular freight and passenger service." Standing on the pilot of Reader's 1702 is Charles E. Martin, son of an Illinois Central engineer.
John Martin, 110 N. Greer St., Memphis, Tenn. 38111

AN OLD steam locomotive built by the Brooks Locomotive Works of American Locomotive Company at Dunkirk is wanted by a new group wishing to preserve steam. Contact Louis S. Van Wey, R.F.D. 2, West Lake Rd., Dunkirk, N.Y. 14048.

FRENCH loco No. 141 R 1199—the type featured in Serge Vitry's article, "My Last Steam Run," in Dec. '72 *Railroad Magazine*—tentatively belongs to the Pacific Southwest Railway Museum Association, Inc., Box 12096, San Diego, Calif. 92112, but is stranded in France.

"To date, only $485 has been donated toward the cost of shipping her from France," writes H. Chalmers Kerr, Jr., president of PSRMA. "Total shipping cost will be $23,400. No U.S. Government agency will ship her free, nor will any French steamship line. Will some steam fan offer us an idea on how we could raise more money for this worthwhile cause? SNCF (the French National Railroads) overhauled our engine and have extended until next summer our time limit for taking possession of her.

"As part of our project, I am writing a history of the 141 R's, hopefully to be published this year or in early 1974. It will have over 300 b&w photos, a few color shots, erection drawings, a color painting by Howard Fogg, and over 25,000 words of text. Two of your contributors, Serge Vitry and photographer Madeleine de Sinety, have supplied material for this book. So far, Mike Eagleson hasn't sent me any of his excellent work; but I'm hoping he will. I still need photos of the plant buildings of Lima, Alco, Baldwin, Canadian and Montreal locomotive works; also first-person accounts of construction of 141 R's, etc.

"Any help given for the preservation of a great French steamer and its display in a railway museum in San Diego—and possibly for pulling fantrips also—will be conferring a boon on present and future generations."

A REQUEST for a surplus U.S. Army 2-8-0 from Ft. Eustis, Va., for use on the Texas State Railroad that runs between Rusk and Palestine has been approved, subject to review by Congress. The 1943 Baldwin may be joined by another steamer and several coaches for this new tourist line.

Unidentified train-watcher at White Marsh, Md., on the Baltimore & Ohio, sees an approaching railfan excursion wheeled by former Reading locomotive No. 2102.
Harold O. Wilkinson, 606 Fairway Drive, Baltimore, Md. 21204

QUINCY & TORCH LAKE mining road 3-foot gage, is believed to still own several steamers in a locked roundhouse of this 1940 abandoned Michigan line, reports Tom Roberts, 97 N. 31st St., Battle Creek, Mich.

BUCKTAIL CHAPTER of NRHS has helped Mike and Bill Bauer with laying track for their 2-foot-gage 1939 Henchel 0-4-0T. Lettered "Bucksgahuda & Western No. 1," the little engine operates occasionally, reports Jeff Damerst, 209 W. 5th, Emporium, Pa.

AN OLD 0-4-0T Porter alone on U.S. Route 24 near Logansport, Ind., has been seen by Lee A. Miller, Box 537, Metamora, Illinois. She is painted a dark green but rust seems to be gaining on this standard-gage oilburner, in poor condition.

PENN CENTRAL tower operator Ed Russell owns an ex-Connecticut Coke Co. 0-4-0T "fireless cooker" which he carelessly keeps on display in his backyard. Sadly, someone has stolen her bell, whistle, builder's plate, and steam pressure gage. Ed sure wants to get them back, no questions asked. Contact him at 741 Race Brook, Orange, Conn. 06407.

THE RAIL CITY steam tourist road located at Sandy Creek, N.Y., may be in such bad financial shape that it can't operate in 1973, reports F. L. Scholl, 111 Columbia Ave., Syracuse, N.Y. 13207. Ex-Bath & Hammondsport 2-8-0 No. 11 is the regular motive power, with other small steamers on display. Let's hope this road has better luck very soon.

STEAM FANS will be intrigued by a new book, *Locomotives of the Empire Builder,* subtitled *A Railbuff's Primer of Steam on the Great Northern Railway,* published by Normandie House, Chicago, to sell at $8.95 (or 5 percent discount from *Railroad Magazine* Book Service). The book is staple-bound; 86 pages, 9x11", loaded with steam photos and text for each type, but unfortunately no action shots nor views of servicing locos. Included are three pages on tenders and tanks, a final GN steam roster (1962), a bibliography, an account of the availability of scale steam models, and a story of the snowslide disaster of 1910. The author, Charles F. Martin, writes to us:

"Perhaps, had my father explained about girls before showing me the 'little railroad engines' at the Century of Progress in Chicago, my life patterns might have been fashioned to another rhythm. But as it happened, the steam loco, somewhat to my wife's consternation, has for me about the same attraction as a pear-shaped derriere."

THE SOUTHERN'S *Best Friend of Charleston,* a full-size, live-steam replica with her antique-type train, visited Birmingham, Ala., for two weeks last fall to help the city celebrate its Centennial in cooperation with the Heart of Dixie Railroad Club (NRHS). The original *Best Friend*—as every schoolboy should know but doesn't—powered the first steam train to run in this country, in 1830, on the South Carolina Canal & Rail Road (now in the Southern system).

MALLET No. 11, from U.S. Plywood, was fired last September 24th by members of the Puget Sound Railway Historical Association, Inc. (Box 3801, Seattle, Wash. 98124), after her firebox had been cold for 12 years, and later was operated from the PSRHA museum on the University of Washington campus to the outskirts of Kenmore, Wash., over ten miles of an abandoned Burlington Northern branch. Harold Borovac writes about it as follows in *The Sounder,* the Association's monthly newsletter:

"After many weeks of heartbreaking endeavor, the coveted state permission to fire up was granted. The tedious piece-by-piece reconstruction of the firebox brickwork was undertaken by Bill Brownfield, Bernie Reagan, and John Taubeneck. All driving-box grease collars were laboriously checked and oiled by Gilbert Clemans crawling along the ties beneath the engine.

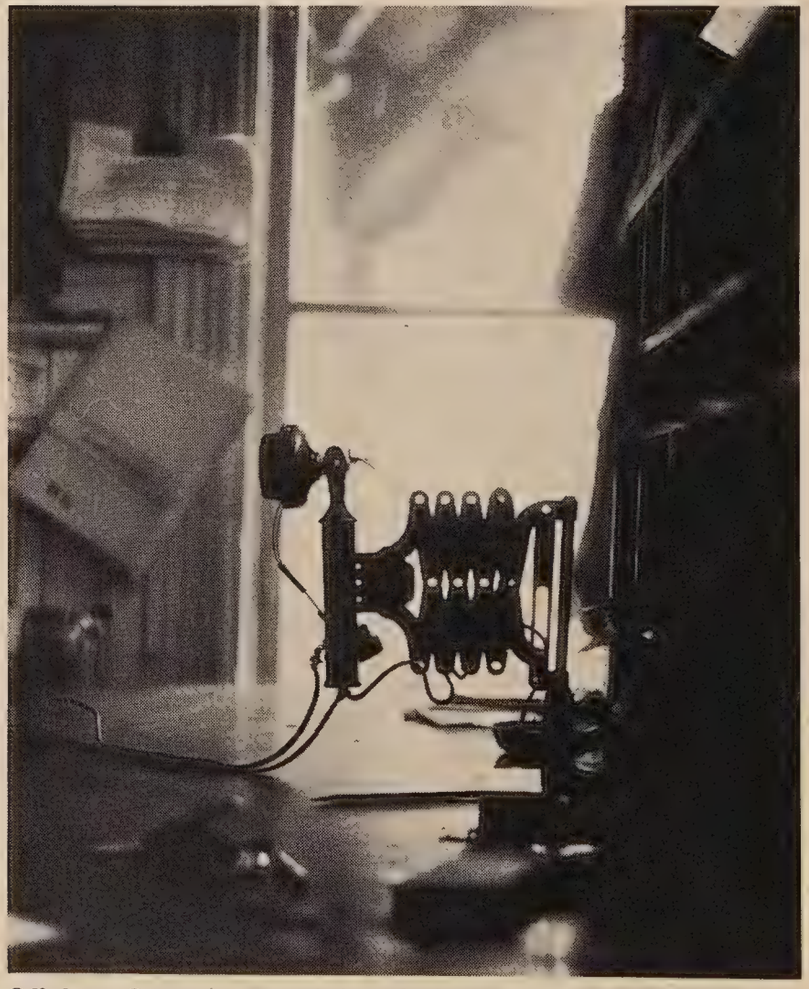
"A new supply of fuel oil to replace those many gallons depleted by vandals was obtained and fire-up began. But it wasn't easy. During the intervening years on display, the weatherman and Jack Frost had contrived to break a hole in a pipe elbow of the oil line just below the burner. It gushed a sizeable stream. All thoughts of firing up were abandoned until a replacement fitting could be installed. "Mac" McCulloch and his auto were pressed into service. It was a mean place for a plumbing job—an oily mess beneath the firebox and between drivers, but Dave Alexander did it.

When steam pressure reached 100 pounds, both injectors were tested and found in good condition. Hydrostatic lubrication of the air compressors began and the compressors were started for the first time. After minor adjustments the pump governor was set, air brakes were tested, and the locomotive was ready for an operating test. Her first movement was made at about six o'clock on a Saturday evening complete with thunder and lightning. But all systems functioned satisfactorily, and no problems were contemplated for the trip to Kenmore."

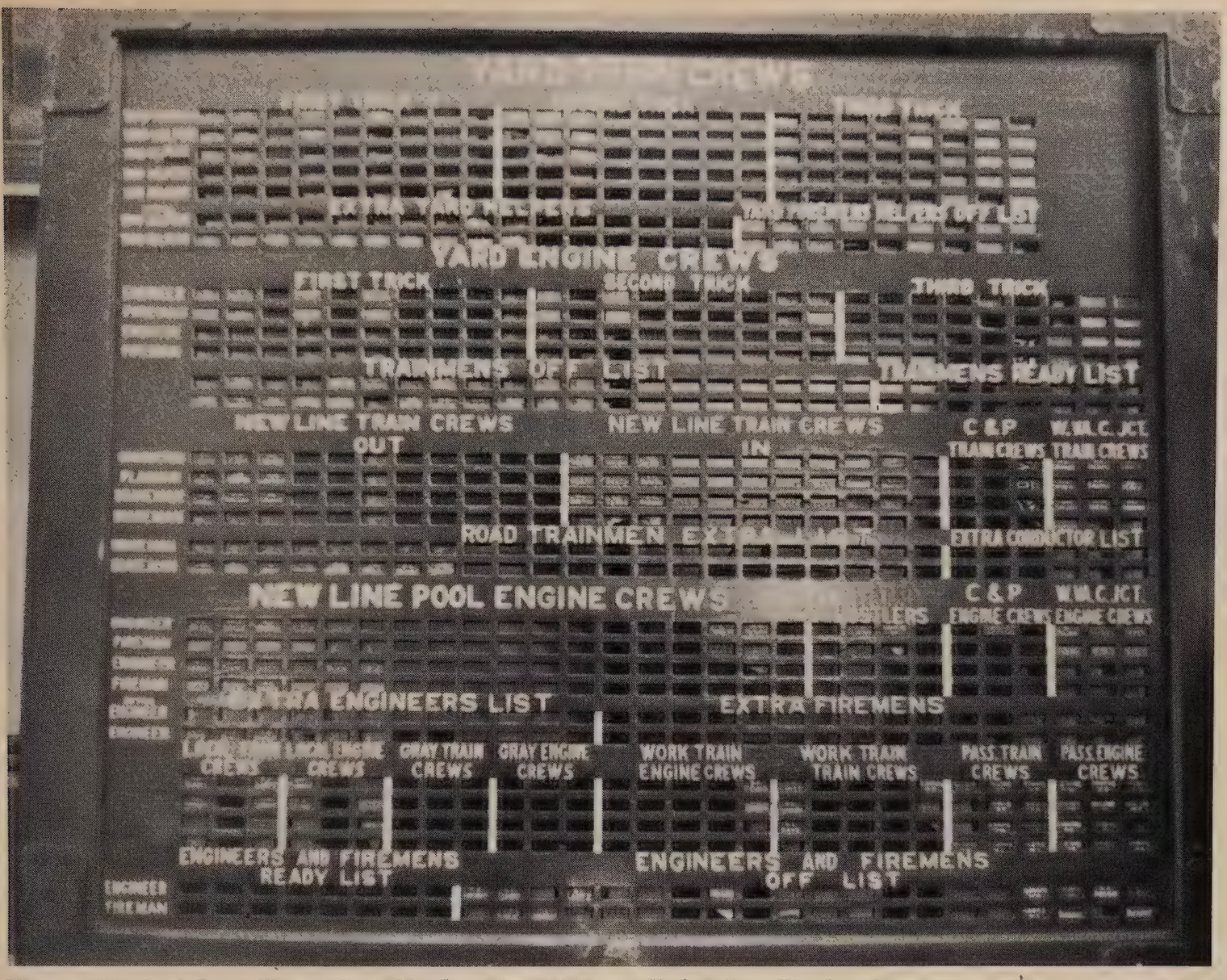
PHOTOGRAPHS OF THE MONTH

Canadian Pacific switcher 6275 wheels a string of boxcars past the quaint depot of Goderich, Ont., on May 30, 1958.
Elmer Treloar, 101 California St., Highland Park, Mich. 48203

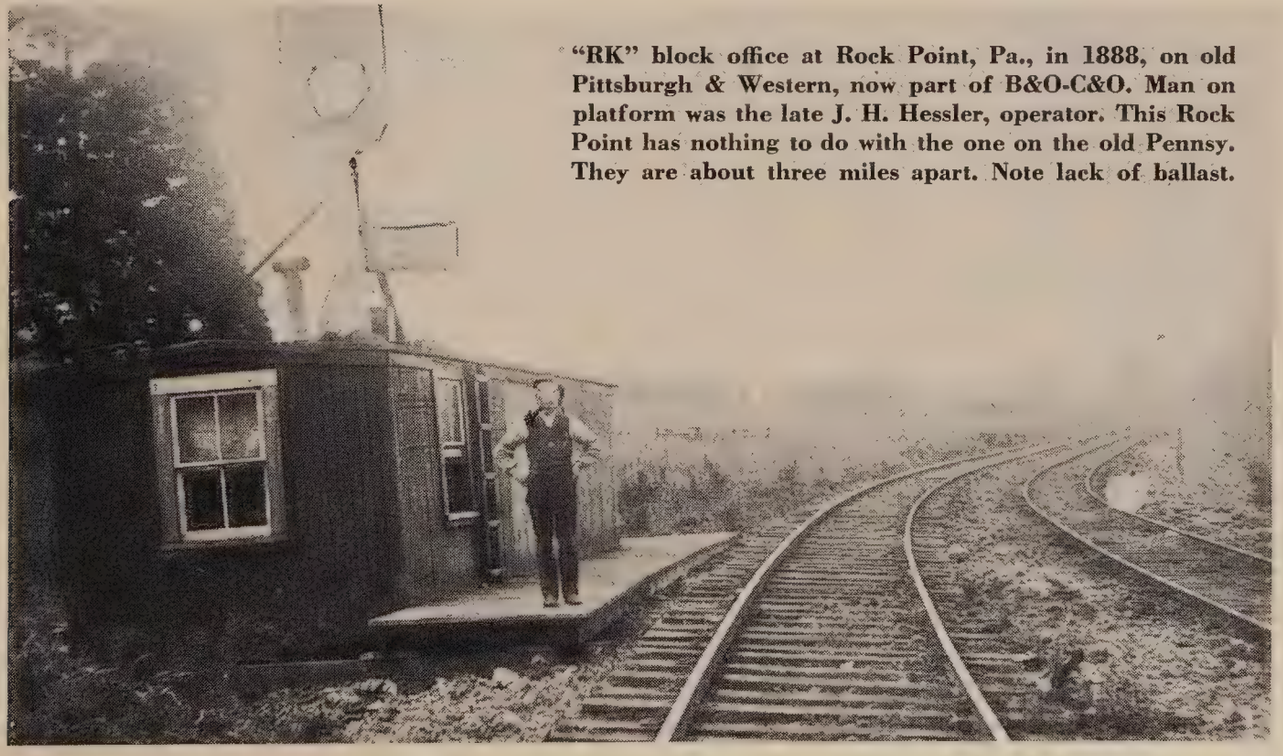
Illinois Central recently sold a lot of old switch lamps to employes, railfans, and antique collectors.
Illinois Central photograph



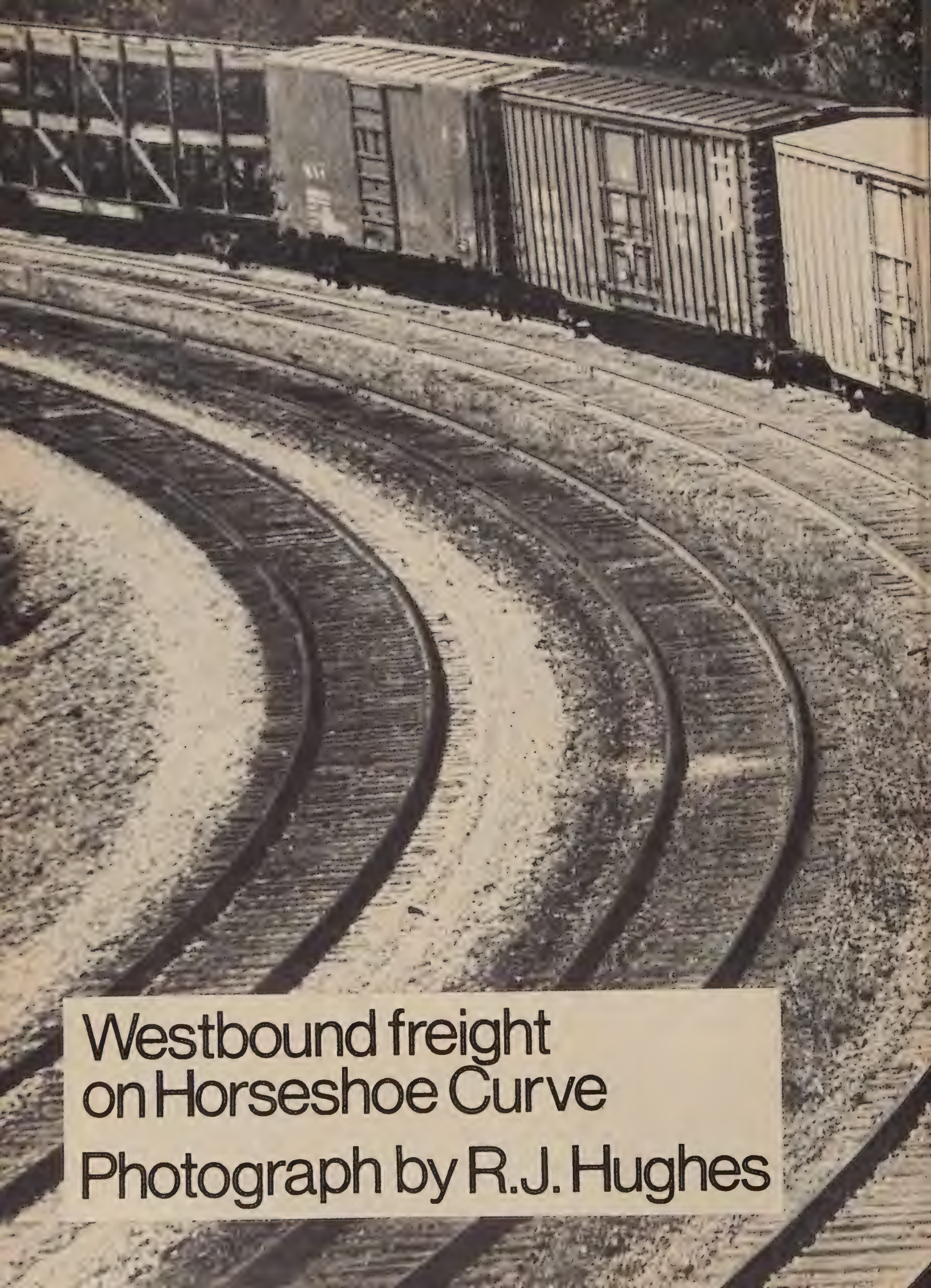
Off duty. Camera study of the telephone in the CP Rail station at Aggasiz, British Columbia. Depot is approximately 70 years old.
A. Dykstra, 270 Angela No. 9, Port Moody, B.C., Canada



Western Maryland Ry. callboard from Maryland Jct., W. Va., caller's office. The board was replaced by a computerized operation and presented to the Western Maryland Railway Historical Society Museum in Union Bridge, Md., last July.
Wayne Monroe, 831 Ivydale Ave., Reisterstown, Md. 21136



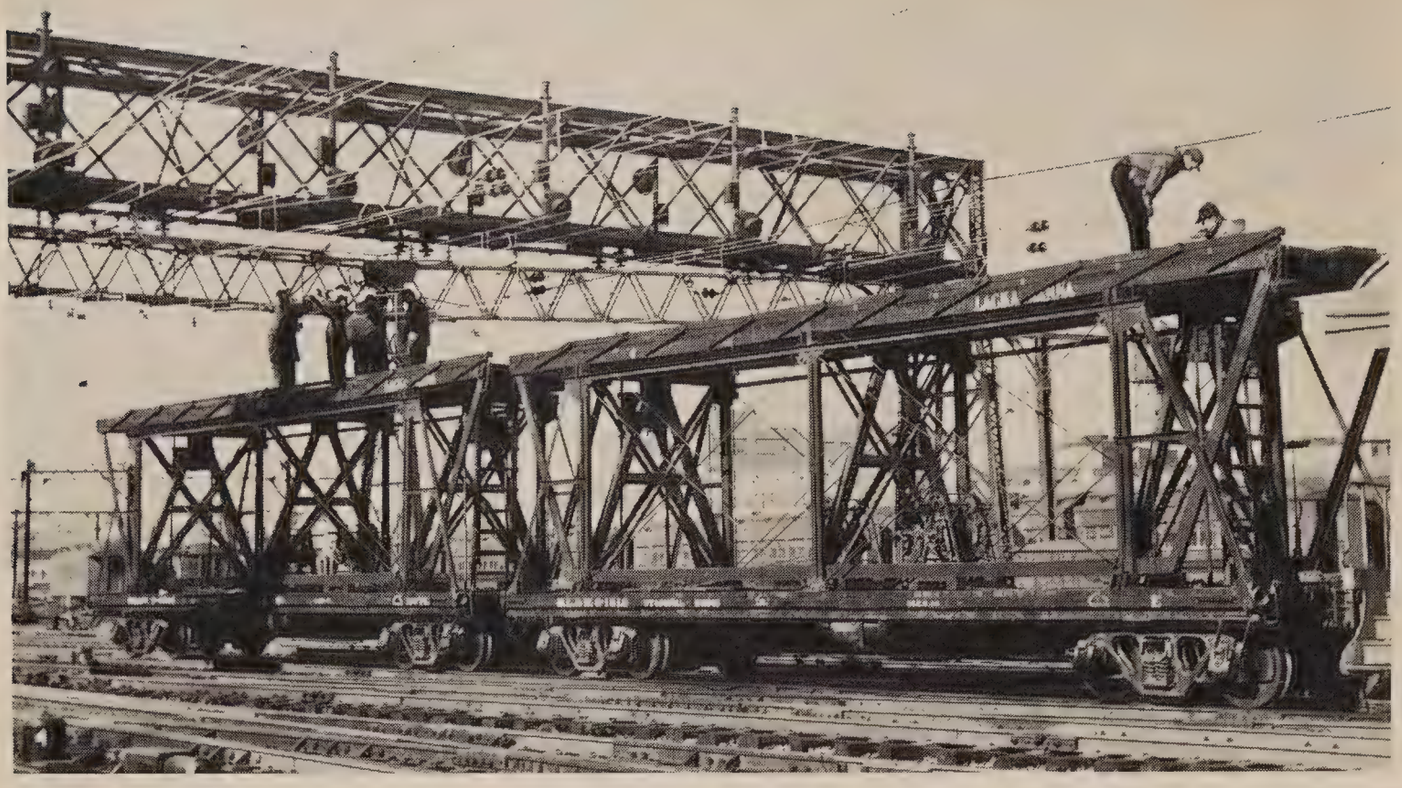
"RK" block office at Rock Point, Pa., in 1888, on old Pittsburgh & Western, now part of B&O-C&O. Man on platform was the late J. H. Hessler, operator. This Rock Point has nothing to do with the one on the old Pennsy. They are about three miles apart. Note lack of ballast.



Westbound freight
on Horseshoe Curve

Photograph by R.J. Hughes

6184



Lackawanna line train at work at the old Hoboken, N.J., Terminal in the late 1950's. This terminal was used also by the DL&W diesel-electric through trains and the Erie's diesel-electric commuter and through trains.
Photograph by Sy Reich

Photographed by O. Winston Link for Pennsylvania Railroad

Morning line-up of Pennsy GG-1 locomotives ready for service at Sunnyside Yard in New York about twenty years ago.

A steamship passenger's introduction to the White Pass & Yukon was the view of the train from the ship as she stood on the wharf at Skagway, Alaska. The loco seems eager to climb to summit of White Pass, portal of legendary Klondike.
(J. Norman Lowe collection) From "Narrow Gage Rys. of Canada," received in our Dec. '72 issue

A smoke-belching 4-6-2, No. CT258, rolls across the Formosan landscape with a load of freight on a bright spring day in 1971.

Richard M. Todd, Box 4052,
APO San Francisco 96319

PASSENGER TRAIN SURVEY

Amtrak representative Christine Koontz was borrowed from a Florida run for the reinstated *Montrealer*, Sept. '72.
Photograph by C.M.H. Wilmoth

NATURALLY you'd expect Amtrak to buy passenger cars, but now they are buying engines also. The Electromotive Division of General Motors at La Grange, Ill., has just begun building 40 new 3000-hp diesels, costing $18 million, for the National Railroad Passenger Corp., better known as Amtrak. The new units are due before this summer's heavy travel season and will replace 47 older-model 1500-hp locos leased from the Santa Fe.

They will be used on routes between Chicago and Fort Worth and Houston; Chicago, Kansas City, Mo., and Los Angeles; and San Diego and Los Angeles. The locomotives represent the first purchase in the $147 million capital improvement program authorized by the Congress last June for the current fiscal year.

ALL STATES below the Mason-Dixon line and east of the Mississippi have one thing in common: inadequate rail passenger service. To open the way for more and better trains in that area, the National Association of Railroad Passengers (NARP) is asking the Southern Railway to join Amtrak. According to NARP, the Southern's continued refusal to become part of the Amtrak system deprives that section from the full advantage of national programs to improve passenger service.

The non-profit Association says Amtrak "offers more opportunities for growth and modernization than does operation by individual railroads." Furthermore: "In all facets of transportation today, few improvements or expansions in service will be forthcoming without Federal assistance. . . . As long as the Southern Railway stays out of Amtrak and continues to follow an independent, private course, communities along its lines will not receive any significant service improvements."

At the same time, NARP has made a strong pitch for increased Amtrak funding and for expansion of rail passenger service in the South. The Association points out that the Interstate Highway program will cost $76.3 billion and that a five-year program to improve aviation facilities will cost $2.6 billion. Thus far Amtrak has received only $219 million in Federal grants and $200 million in Government-guaranteed loans.

A FEDERAL GRANT of $11,400,000 to the State of Connecticut will help modernize commuter rail service on the New Haven Railroad. This grant, from Urban Mass Transportation Administration, is added to the UMTA grant of $15 million last March to update the New Haven.

"Both grants will ultimately result in laying 173 miles of welded rail and extensive replacement of ties and track surfacing," according to Secretary of Transportation John A. Volpe. "They also will include additional modernization of electrical and signaling systems, final construction of new service and maintenance facilities, and upgrading of the Danbury branch line."

THERE IS a real need for better passenger service, not only on the New Haven but on all other American rail lines as well. An incident that occurred on the Penn Central at Mount Vernon, N.Y., a few weeks ago is a fair sample of how riders feel about it. The local revolt may have come from the season's first snow, chilling a group of commuters stranded at the depot. Or maybe because in every man's life there is a moment of truth.

But for several hundred irate men and women enough was enough: They reacted against Penn Central. Some of them commandeered a train. Others threw a section of fence across the tracks in an effort to stop expresses that whipped by, leaving them marooned and miserable on the station platform.

Revolt began that morning when the 7:03 from Stamford, Conn., carrying hundreds of workers to Manhattan, broke down at the Columbus Avenue station in Mount Vernon, about 15 miles north of their destination.

The conductor said it would take up to two hours to fix the engine trouble and hinted the commuters might find it more convenient to walk the quarter-mile down the tracks to the next station, Pelham. So the group trudged along the tracks and joined about 200 persons waiting for the train on the Pelham platform.

Three trains came, but whizzed past. Pelham is only a local stop. The stalled train was a local. Therefore it stood on the local tracks, forcing other local trains to back up behind it. A few trains were rerouted as expresses, but these all thundered by Pelham—a local stop.

One commuter said it might be possible to stop the next train. Within seconds, two dozen of them were standing on the express tracks brandishing umbrellas. The next express stopped—it had to. The engineer ordered the commuters to get out of the way. The would-be passengers told the crew to open the doors. The crew did so. People on the tracks and about 400 on the platform jammed onto the train.

The train was 71 minutes late arriving at Grand Central Terminal. Local trains backed up behind it also were late.

SOUTHERN PACIFIC has told its 11,000 commuters that it wants to increase fares to recover part of a $2.5 million annual loss it sustains on the San Francisco Peninsula service.

"Even with the proposed increases," says George V. Houseman, SPs' manager of commuter traffic, "regular SP riders would be paying less over comparable distances than they would on Greyhound's Peninsula buses, on Bay Area Rapid Transit trains, or on other

Crowd of 400-500 greet inaugural run of *Montrealer* at St. Albans, Vt. Familiar old trainshed is gone, but Central Vermont roundhouse and shops still remain.

C.M.H. Wilmoth, 819 N. Main St., Wheaton, Ill. 60187

Canadian Pacific's eastbound *Atlantic Express* on the old Stoney Creek wooden bridge in British Columbia, probably in 1887. The engine, No. 402, was built in 1886. The train is making its usual stop to let passengers enjoy the spectacular view.

Photograph from archives of CP Rail

railroad commuter services in New York, Boston, Philadelphia, or Chicago."

DAN AND ROSE LUCEY of Oakland, Calif., had a complaint in *Newsweek* the other day about a trip they took from Oakland to St. Louis:

We left Oakland 2½ hours late; two air-conditioned cars broke down. We ate in the dining car and had sandwiches—my bread was moldy. In Kansas City, 50 seats had been oversold and bedlam ensued. The three of us sat huddled in a roomette, our teen-age daughter had to sit on the commode! The power in the snack bar went off—consequently no lights, no refreshments. A nation that can build the most sophisticated weaponry to destroy human beings simply cannot put fast, efficient trains on the road.

The same issue of *Newsweek* carried this gem from Maureen Cohen of Springfield, Pa.:

Two weeks ago I was on the *Coast Daylight Starlight*, completing the last leg of my trip out west on Amtrak. The air-conditioning failed. A steam pipe exploded in the dining car. We were an hour late arriving in Oakland. The bus to San Francisco that is part of the train trip could not accommodate all the passengers—and it was the only bus that night. Amtrak has *not* improved train travel.

LETTER to us from Frank Tobey, P.O. Box 201, Clatskanie, Ore. 97106: "I enjoy your *Passenger Train Survey* each month. However, I noticed errors in the comments of R. M. Jochner, the Southern Pacific official who is Amtrak's general manager in the Bay Area. For one thing, the *San Francisco Zephyr* was cut back to tri-weekly service between Denver and San Francisco, effective with last September 10th's Amtrak timetable. Secondly, the *Shasta Daylight* was dropped in 1966.

"The *Coast Daylight* runs four times a week between Oakland and Los Angeles. On the other three days, a train called *Coast Starlight* operates between Los Angeles and Seattle. It does not go to Vancouver, British Columbia."

NEWSPAPERS and TV broadcasters usually gloss over the fact that some 55,000 people a year are killed by automobiles on the nation's highways, but they are quick to pounce upon and dramatize a railroad wreck in which people perished. They really whooped it up in reporting the worst train disaster in this country since 1953 that ended 44 lives last October 30th near the Loop section of Chicago.

In addition to the dead, more than 300 were injured when an Illinois Central Gulf Railroad commuter train backing into a South Side station was rammed by a second IC electric train during the morning rush hour. Each train carried about 500 passengers. Federal investigators raised questions about the strength of the lightweight steel cars used by commuter lines.

When the first train overshot the station it may have tripped a switch which changed a signal observed by the second train from red to yellow. The yellow signal permitted the second train to travel toward the station at approximately 30 miles an hour, but also indicated to the engineer that the track was clear for 2,000 yards.

The engineer of the second train, Robert W. Cavanaugh, shouted a warning to passengers before the collision. Cavanaugh, who was injured, was among the last victims freed from the wreckage. He was removed by one of four helicopters which joined a dozen ambulances in speeding victims to hospitals.

Candidates Nixon and McGovern quickly revised their plans for campaigning in Chicago. Nixon called off until a later date a downtown motorcade, while McGovern cancelled a torchlight parade. This reminds us that over the years circus trains have often been rerouted to bypass communities suffering from such disasters as fires, floods, crop failures, and so on.

THIS EDITORIAL, dripping with nostalgia, was culled from a 42-year-old issue of the Wisconsin Rapids, Wisc., *Daily Tribune*:

Why do small-town folk go down to railroad stations to see No. 6 pass through? To see who gets on and off? Well, partly, perhaps; but it is more probable that they go chiefly to get a look at the engine.

The engine is more nearly alive than any other machine yet devised. She puffs and pants like a living creature. When she climbs a long grade her labored breathing is the sort of noise made by animals. Her very whistle has a wild, eerie note that no other mechanical sound can ape.

What thrill is greater than you get when you stand at a railway crossing and see a great express train thundering by, her cars gleaming with brass and bright paint, a long plume of smoke lying low over her wind-swept back, a grim-faced engineer peering alertly from the window of the cab, and her red lights blinking as they disappear in the distance?

What thrill equals the weird, heart-moving stab of a locomotive whistle, heard far off late at night in the silent country? What panorama is so stirring as the sight of one of those old-fashioned trainsheds—now, alas, being replaced by more modern, less exciting stations—where trains stand in rows and dozens of engines send jets of white steam up to the cavernous vacancy overhead?

If Mala Vaughn of Fort Myers had looked at a timetable beforehand, she might not have waited in front of the Seaboard Coast Line depot at Okeechobee, Fla., one mild January day in 1971 for the southbound *Silver Meteor*, which whizzed by without stopping. Next time she'll probably consult an Amtrak schedule.

William T. Morgan, P.O. Box 6863, Fort Myers, Fla. 33902

Carl V. Brouillette, 1801 North "C" St., Oxnard, Calif. 93030

INTERESTING RAILFANS No. 122

COLE D. WALTERS

by FREEMAN HUBBARD

Cole and wife, Marion, enjoy trip in '70.

FIFTY-TWO years ago on January 14th Cole Walters was born into a world of classic beauty: Charleston, S.C. Although this city is famed for its stately white mansions on tree-shaded streets, its general area was surrounded by puffing, chugging, smoke-plumed railroads: namely, the Seaboard Air Line, the Atlantic Coast Line, and the Southern, plus a dozen or more logging and industrial roads. This exciting background made Cole a railfan. His father, Leland Walters, is a retired chef and no kinfolk ever worked for a railroad. But the lean, wiry lad, dark-haired and blue-eyed, developed an interest in machinery, especially steam power, from prowling around the old Southern locomotive shops near his home.

"How well I recall the unmistakable smells of smoke, steam, and valve oil," he says, "and the clanking and hissing, the whistles and bells, and the thunder of exhaust on the main line!"

As the boy saw them, maintenance and operating crews were very select men chosen to perform privileged tasks. A desire to learn how locos worked obsessed him. Why, he asked himself, did each piece of metal appear to move in a definite way, and what was its purpose? He wondered why engines seemed to live and breathe and where the air for their automatic brakes came from. At age 17, still fascinated by steam, he quit school to take a job running a steam shovel.

Two years later, on a blind date, he met Marion Beach, a gay, well-formed blonde with cornflower-blue eyes and a saucy smile. Plenty of men have gone to the altar for less than that. Marion was only 16 when they said, "I do." The pair went through some lean years; but today Marion regards their life together as "love, laughter, religion, some illness and heartache, but always happiness."

"I married Cole because he was very determined," she tells us.

Her sister, Mrs. Greta Henry of Franklin, N.C., remembers Cole as "a brash young fellow, quick to flare up and just as quick to help a buddy." She adds: "While the young couple were living in Bridgewater, Mass., they had a struggle to survive. Cole opened a small lawn-mower repair shop beside their home to help make ends meet. In 1958 they moved to Mt. Pleasant, S.C., where he went into the construction business for himself—earthmoving, roadbuilding, etc. Cole built his own road-surfacing equipment that he couldn't afford to buy. He was, and still is, good at improvising."

Early in life he acquired engineers' licenses for steam, gas, diesel, and electric operation. He bought a 28-foot cabin cruiser without an engine, but rebuilt and installed an old engine and took Marion on a short cruise to hear it purr. The Walters have two sons: Curtis, 30, and Douglas, 28; and a daughter, Dianne, 20. When the boys were little, their father made them a toy riding locomotive out of big tomato-juice cans, a piece of sheet metal, and roller-skate wheels. In those days both parents taught Sunday school and engaged in church and civic activities.

Cole is president and treasurer of his construction firm and his wife is vice president and secretary, while Curtis is general superintendent. Our subject set up his own asphalt plant on a railroad siding. This site naturally led to his "chewing the rag" with railroad men. From one of them he learned about an old saddletank engine rusting away on a scrap track in Macon, Georgia.

"Marion and I hurried down there," says Cole, "and when I first laid eyes on the steamer my heart pounded with

excitement. That old girl was in pretty bad shape, with her cab and saddle-tank rotted out, but to me she looked beautiful. Her wheels were still round and her linkage and springs intact. So I bought the engine and shipped her to Charleston on a flatcar."

Then began the arduous task of restoring the "Catastrophe," as the new owner designated her, later renaming her *One-Spot*. Helping him on the restoration were members of the Charleston Chapter of the National Railway Historical Society. Not only is Cole a charter member of that group but he is also a past president. For five years, he has been a national director of NRHS. In addition, he belongs to the Charleston Chamber of Commerce, actively on its Better Business Committee, and is a 32nd degree Mason.

On May 20, 1967, an outdoor party was sponsored by the then newly-formed Charleston Chapter on the landscaped grounds of the Charleston Oil Company. The setting was quaint. Beneath a canopy supported by aluminum rods were folding chairs and a podium displaying a large, gleaming, bronze bell. There, too, stood a forlorn-looking Columbia (2-4-2) type engine without a cab, Cole Walters' *One-Spot*. Lovely ladies wearing 1865 attire and a few gentlemen in period costume roamed around. One of the hostesses, pretty Marion Walters, explained to Carl V. Brouillette. a Naval civil service employe, that the group was accepting memberships in the new chapter.

"I'd like to join," Carl replied, "but I live in Oxnard, California."

"That makes no difference," she said sweetly, "provided you love steam locomotives."

"I do," Carl assured her, and promptly signed up as a member. Eventually, he and his wife rode on two of the chapter's steam excursions.

Now listen to T. Wilbur Thornhill, president of the oil company on whose property the affair was held.

"I'll never forget when Cole came rolling onto our grounds in his teapot," he recalls. "With her cab loose and dangling, she seemed too decrepit even to reach the end of our industrial siding; but the amateur hogger sat at the throttle as proudly as a Casey Jones. Before that initial run he had cleaned the bearings with meticulous accuracy, reshimmed them, and repacked the grease boxes. Then she was ready to be fired. He started the blaze and nursed it along until he got up about 40 pounds of steam. At that instant a flood of water poured into the firebox and the tubes began blowing. Cole was as flustered as a wet hen with two chicks, but held his ground.

"In time he got the machine fixed with new tubes and a new crownsheet, and was ready to highball again. He fired her and pushed the needle up to about 60 pounds of steam. I have never seen a man look so happy as when he yanked the whistle cord, evoking a hoarse, melodious sound. After that he practiced half a day at the throttle and blowing the whistle."

Cole at throttle of his *One-Spot* with Charleston Chap. NRHS No. 44 during Parade of Progress meet.

One of Cole's trucks with coal at Branchville ready to solve loco 630's fuel problem for run.

Battered but still serviceable: 2-4-2T "Catastrophe," shown in the Southern Railway yards at Charleston, S.C., Dec. '67, was returned to service.

The celebration of South Carolina's Tri-Centennial in 1970 included a street parade in Charleston. Cooperating with the NRHS, which was holding its national convention there, the Southern Railway provided a float with a full-size operable replica of the *Best Friend of Charleston* and its train mounted on an articulated trailer, designed for that purpose by Cole Walters and built in his shop by two NRHS members, Milton and Russell Nelson, a father and son.

On another occasion, a Charleston "Parade of Progress" featured six locomotives (four live steamers and two diesels). These were the *Best Friend* replica, the *One-Spot*, the Charleston Chapter engine No. 44, the Southern's No. 5, and an old-vintage EMD switcher plus GP No. 38, the Southern's newest and best diesel, with 2,000 hp. For this spectacle Cole designed and built a portable turntable on which the Southern reversed its *Best Friend*. Garbed like an engineer, he drove the *One-Spot* and added to the pleasure of many local railfans by letting them ride in his cab.

Says Wilbur Thornhill: "The railway brought its museum pieces to Charleston—those pieces that get loving care from Bill Purdie, the system's master mechanic in charge of steam and historic equipment. Cole Walters in the cab of his antique led the parade. You could have seen joy written all over his face, while his little engine was making as much noise with her whistle as did any of the big ones."

Since acquiring the *One-Spot*, Cole has become closely involved in railroad trackwork—on his own property as well as commercially for Southern steam equipment under Bill Purdie's guidance. The two men have been good friends for about ten years.

"Cole is a valuable asset to the Charleston NRHS," says the master mechanic, "but with his limited knowledge of steam, there have been times when he worried me by firing up steam engines."

Our hero's fascination with railroads is tied in with their mechanical aspects, according to C. B. "Breck" Pegram, a Charleston printer. "Cole is a packrat. He will accept almost any mechanical item you give him and has bought some unusual items that wouldn't appeal to most railfans.

"He loves maintenance-of-way motor cars almost as much as locos and got two or three of them from the Norfolk Southern. In 1971, as president of the chapter, he tried to work out a run with NRHS equipment coupled behind a Southern freight train to some point up the line, just to enjoy the thrill of a mixed train. The deal flopped because these freights operate in the middle of the night, as a result of which the connections back home were uncertain because the returning freight is often as late as ten hours."

Cole and Marion in a happy mood on their wedding day, September 15, 1941.

Al Langley of North Augusta, S.C., who also knows Cole very well, agrees with Breck that Railfan No. 122 is best described as a mechanical enthusiast. "He's not the kind of fan who cares how many hours the *20th Century Limited* took to run from New York to Chicago in 1938 or which road had the most Mallets or the steepest grade,"

Although his chief hobby is steam locomotives, he is now engaged in restoring three Fairmont motor cars, all different models, and a large Northwestern H.D. car with a V-8 Ford motor of 1932 vintage. He also has five stationary steam engines of various makes and models which he hopes to restore to mint condition. Likewise in his collection are two upright steam boilers which are operable and which, he says, will be used to power those engines when completed.

In the Charleston Chapter's early days, the group made frequent runs to Branchville, Aiken, and Columbia, S.C., with steam locomotive No. 630, loaned by the Southern. Loading fuel was a big problem. Cole solved it by providing his own trucks to haul coal from Charleston to the halfway point, Branchville, to which place he also moved his crane for loading it.

His plant facility in Charleston—built to accommodate and operate several pieces of chapter-owned equipment as well as his own *One-Spot*—

was kept open on week-ends for the maintenance of locos, coaches, etc. The shop building was large enough to house a Pullman car or loco in rainy weather and had a track inside. Also, the Walters shop, machinery and tools were available to chapter members. This property has since been sold and the chapter is seeking another location for its equipment.

The *One-Spot* has been converted to oilburning and sold to an amusement park in Myrtle Beach, S.C., but Cole can run her any time he goes there. Says his wife: "Young and old see her all steamed up and hear her melodious chime whistle. This fills me with pride."

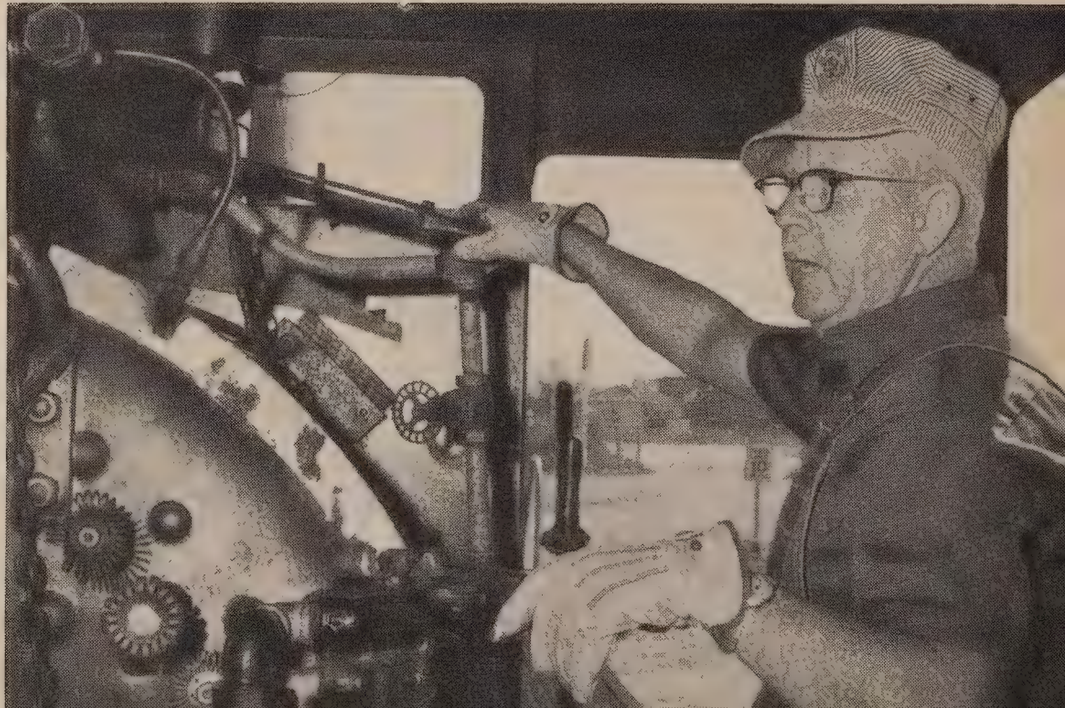
Marion boasts a collection of more than twenty workable coffee mills. The Walters' main form of relaxation is domestic travel. They rebuilt and repowered an old tugboat, the *Playmate*, in which they cruised off and on for about eight years. They now have a motor home, a Boston Whaler, and use it to explore rivers, creeks, and lakes as well as for camping, and Cole enjoys fishing. Their address is P.O. Box 294, Johns Island, S.C. 29455. Its home furnishings reflect early American railroading. The walls are adorned with railroad pictures, antique coach lamps, and two oil paintings that show the *One-Spot* and the *Playmate* respectively, by G.P. Darby, Jr. Our subject likewise collects antique firearms.

Also in Cole's collection are locomotive whistles, bells, headlights, markers, switchstand lamps, switch locks and keys, some railroad bonds, and about 75 railroad books, mostly about steam power. The Walters are fond of animals, both wild and domestic. They have a German shepherd dog named Heidi and a Siamese cat, Sam, which prefers the most comfortable chair in the house and rarely drinks out of anything but a kitchen faucet.

Cole is 5 feet, 8 inches tall and weighs about 145 pounds. Like most railroad buffs, he and his wife are nonsmokers. No. 122 finds a deep satisfaction in taking care of his machinery and playing his Hammond organ.

"Fewer things burn me up so quickly as to see someone abusing equipment or machinery, particularly if it's mine," he expounds. "I don't believe in luck, good or bad, nor any other superstition. Events that happen to you usually result from groundwork laid down by your ability to plan and carry out your plans, or your lack of ability to do so."

Track gang works on Ironhorse Plantation, Johns Island, where Cole lives.
IH&P R.R. Co., P.O. Drawer 67, Mt. Pleasant, S.C. 29464



(top) Recognize *One-Spot*? She was sold to an amusement park at Myrtle Beach, S.C., converted to an oilburner, obtained a cab, and is still going strong. (bottom) C. D. Walters at throttle of No. 1 for last time with a coal fire.

STEAM'S FINEST HOUR

by E. W. Emmott

NOT ALL the railroad action is on the high iron. The men who pull the throttles, fill out the brake reports, and flag trains naturally find plenty of it. But so do those in the back-shops, where the engines are renewed for their battles with time and tonnage. Something is always going on there, problems that call for skill and experience. True today, it was doubly true years ago when steam was still king.

Albert Helwig, who now lives in Reseda, California, is a machinist in the aerospace business; but if he had his way, he'd still be on the Chesapeake & Ohio payroll at Huntington, West Virginia, as his father and grandfather had been before him. Leaving the rails was not his idea. When the Chessie dieselized, its staff of machinists dropped from 450 men to 75, and Al didn't have enough "whiskers" to say with the pounding wheels. He's well settled now, 16 years after he left the C&O. Even so, he still has steam and pin grease in his blood and he looks back wistfully on the days when he worked on 16-driver Mallets as the high point in his life.

Al hired out to the C&O as a machinist apprentice in 1939, when he was 18. Learning the job the tough way, he spent six months in each department before moving to the next one. There were six trades: boilermakers and sheet metal workers (the difference between these two being mostly in the thickness of metal they worked with), and carmen, electricians, blacksmiths and machinists.

The machinists repaired everything on the engine that moved, besides such movable parts on the tender as the boosters and brakes, and the car brakes (the rest of the car work was reserved for carmen). Al advanced through roundhouse and backshop, working on brakes, cylinders, running gear, valve-motions, controls, and auxiliary gear such as injectors and feedwater heaters. Thus he had each phase of apprentice training, except welding. His father had made sure the youth knew how to operate a lathe, teaching Al the tricks that he himself had learned during his own service or from his own father.

Al's training was interrupted by military service from 1942 to 1946. Then he returned to the Huntington shops, continued his apprenticeship, and graduated as a full-fledged machinist, like his father, in 1947.

The Chesapeake & Ohio, hauling lots of coal through mountainous territory, specialized in big power. Passenger engines tended to be 4-8-2 (Mountain) types such as the ones bought from Alco in 1911. Fast freights pounded over West Virginia rails with 2-10-4's, turned out by Lima in 1930; and there were other types; but the most impressive locomotives with Huntington as

Chesapeake & Ohio 1470, ex-869, class H-4a, built by Richmond Locomotive Works in 1918, photographed at Toledo, Ohio, in 1938. Only engine of its kind rebuilt to simple from compound; job was done at Huntington Shops.
Collection of Harold K. Vollrath, 8938 Maple Dr., Shawnee-Mission, Kansas

their home base were the great Mallets that pulled coal drags. The last steam loco turned out in the United States was a 2-6-6-2, No. 1304, which Baldwin built for the C&O in 1949.

During the gradual eclipse of steam, the Chesapeake & Ohio, which hauled black diamonds, was more faithful to the engines that burned it than was any other major road. Norfolk & Western also was loyal to its coalburners in the closing days, for the same reason.

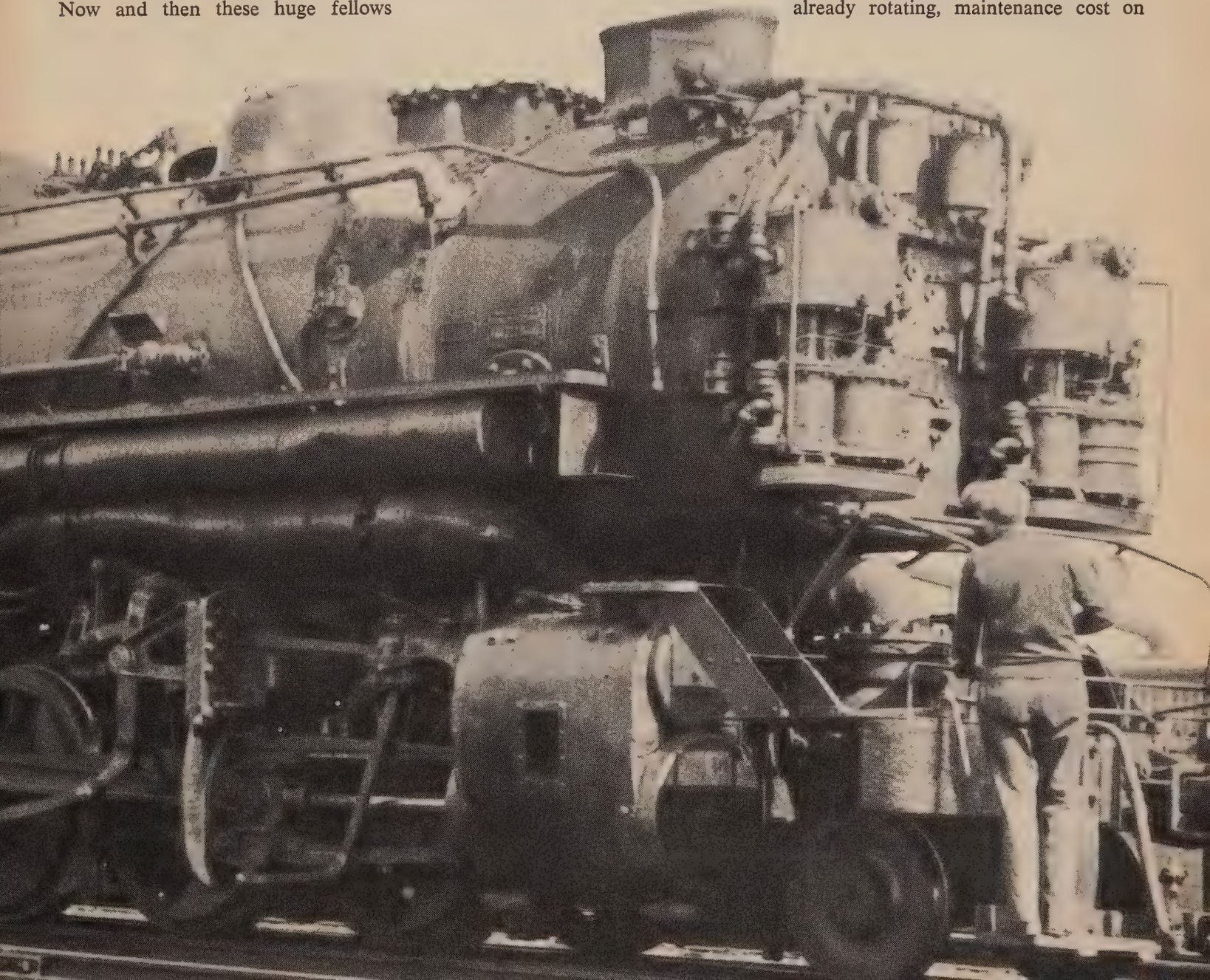
ALBERT HELWIG liked working on the older big sisters of the C&O's steam fleet. The mighty engines in the 1100 class (Alco, 1924) weighed in at 565,000 pounds (more than 280 tons). They developed 103,500 pounds of tractive effort and had a 2-8-8-2 wheel arrangement—two Consolidations built together. Some were compounds with great low-pressure cylinders at the front, where the exhaust steam went straight from the outlet valves to the nozzle and shot out of the stack, with a sound you couldn't miss.

Now and then these huge fellows were shopped. Often they were taken apart, with the steam pipes removed, and then a gigantic traveling crane would lift the rear engine and the boiler off the front running gear. After an overhaul, the front engine was wheeled back into place, and the boiler and rear engine were lifted up and set down again with the big connecting pin in the socket. Then, after the steam pipes, air lines, and other linkages had been re-connected, the iron horses were ready to return to work.

When these powerful engines were new, they trundled from 200 to 225 loaded coal gondolas. Later, trains were shortened to 100 or 125 cars, not because the loads were smaller but because the gons were bigger. Impatient motorists, waiting while the trains crawled past, with the Mallets leaning into an upgrade at a slow five miles an hour, naturally preferred shorter trains. The 20-wheelers built in 1924 were supplemented in 1947 by 2-6-6-6 Limas, with boiler pressure raised to 260 pounds and a six-wheel trailing truck that gave room for enormous fireboxes, 180 by 180 inches.

Those monsters weighed 751,800 pounds. The men at Huntington liked to think of them as the world's largest freight engines, but the Union Pacific "Big Boys" beat them by a comfortable margin, and so did the Erie Triplexes, with driving wheels under the tenders, built back in 1914. The Triplexes occasionally ran out of steam. With all those wheels under the cab, the C&O's new Mallets never did.

There was a lot of room under the Mallet's cab for the booster engine which helped the trains get started. These also were the responsibility of the machinists. Boosters were small, two-cylinder, steam engines which drove a shaft parallel to one of the trailing axles. The center of the trailing axle bore a large gear, while the shaft had a small one. A rocking idler gear, under the hogger's control, connected both. Since the load from the engine-axle was thrown on a gear which was already rotating, maintenance cost on



Mallet H-6 No. 1510 just in from run at Hardley, W. Va., '55. During long life Mallets were often sent to Huntington.
Photograph by Gene Huddleston (Rail Photo Service)

such a device always ran high. But it added tractive power to the engine when it was needed.

The boosters were automatically cut out at a speed somewhere around eight miles per hour, when the steam could be better employed feeding the big cylinders further forward. Except for the boosters, there was not much for the machinists to do in the cab end of the engine. Their biggest responsibility there was the maintenance of the firebox doors.

Those gargantuan Mallets steamed pretty well, but engineers found they would steam even better with the water a little low in their huge boilers. Sometimes, indeed, men deliberately let the water get low, and then took another chance by passing up the next waterplug to make a little better time. As long as you were going downhill, this worked fine. The water would run forward. The bare metal of the crownsheet over the firebox, as well as the front of the firebox itself, would transmit the heat even better into the remaining water around the firetubes. But when your engine reached the bottom of the hill and started up the next one, the water could surge back, hit the cherry-red metal above the water line and instantly flash into steam at several thousand pounds per square inch.

The metal, previously red-hot, which was actually underwater, now would be case-hardened while the metal above it would be soft. Steam would knife through it, on much the same principle as the "shaped charges" used to attack tanks. Clouds of superheated steam would flash into the cab, sometimes blowing the boiler off the running gear (which, surprisingly enough, often stayed docilely on the rails).

HELWIG worked on one Mallet heading for Columbus, Ohio, with the water low. She did all right until she hit a dip in the track near Chillicothe. Then the steam blew out her firebox end and the front end and hurled her pumps—1400 pounds of metal hung over the pilot—a quarter-mile up the track! Afterward, the sad-looking wreck was hauled back into Huntington, where Al helped to rebuild her. The engine returned to service, her new crews undaunted by the fact that the previous hogger had "gone to glory" in live steam, although the fireman had "joined the birds" soon enough to save his life.

Al himself had first-hand experience with live steam on the rampage. When filling in for another man who had reported sick, Helwig got aboard a Mallet, with an apprentice helping him, to adjust the engine brakes. As the fire had only recently been put in, steam pressure was low. The blower purred and hissed in the stack. The stoker rumbling, Al relaxed in the engineer's seat while the apprentice sat in the fireman's, waiting for the pressure to build high enough for the air pumps to cut in.

While they were sitting there, a plumber climbed into the cab to check the fittings that controlled the steam-heat line to the train. Believing in the time-tested rule that a good whack will let any piece of machinery know who's boss, the plumber rapped with a hammer the copper box containing the line's pressure. Immediately a plug 2½ inches long shot out of its socket, propelled by 200 pounds of superheated steam. Instantly a fiery fog filled the

cab. Al shouted to the apprentice to get the hell out of the cab. He himself dove from the cab window. Landing, he crushed a heel-bone on the hard cinders, which kept him off work for seven and a half monotonous months.

A foreman scrambled on top of the engine to shut off the "bug" valve (so-called because of its weird shape), which directs the steam to various places such as the booster engine and the steam-heat line. Another machinist replaced the steam-heat box, and the engine went out again on a run. Later investigation showed that the brass box had a ruptured thread. When the plumber hit it, the threads had spread enough to allow the pressure to drive the plug out like a bullet. The plug itself was never found. Neither Al nor the plumber ever mentioned the hammer-blow to the management.

Flying metal did not have to be propelled by steam—sometimes a sledge-hammer did the trick. On one occasion Al was working with another man, driving out frame-bolts while disassembling part of an engine for overhaul. Helwig stood by with a shovel to catch the bolt after his partner had driven it out of its socket. Something distracted Al's attention just as his mate connected with a mighty swing, and the shovel dropped. The bolt, 1⅜ths of an inch in diameter and a foot long, flew through the air "with the greatest of ease" and broke another man's leg. Nobody complained to the brass collars about that one, either. As far as Al knew, the man never held it against him.

Steam was the boilermakers' stock in trade, but the pipes that transmitted it belonged to the machinists if they ended in connections which had to be ground and lapped to precise fits. Pipefitters looked after less demanding pipes, which carried such plebeian things as water. Highest pressure was in the superheater pipes. The latter contained the steam after it had been collected as saturated steam from the boiling water. They conducted it through pipes in the superheater flues until it had been heated enough to make it completely dry, when there was no danger of it condensing in the cylinders.

If an engineer complained about a leaky superheater pipe, Al would open the smokebox door and pull out the standpipe and four or five other pipes until the offending one was found. Then he'd grind and lap the leaky joint. The leaky pipe was plainly evident, since escaping steam leaves an obvious mark. Sometimes, if a joint simply needed tightening, he'd do it without killing the engine. However, when a joint had to be ground or a header welded, the fire was dropped. While working on a hot engine, Al wore ordinary overalls and gloves, but he moved the way porcupines make love—very carefully.

WHEN Al hired out to the Chesapeake & Ohio in 1939, steam locomotives were in their finest hour. Saturated steam was obsolete. All main-line engines were equipped with superheaters, although some saturated engines with slide valves still held forth in the boondocks. Whether the valves were slides that the superheated steam had put out of business, or piston-valves, they had to fit perfectly. Refacing valves called for considerable skill.

Valve packings also had to be adjusted, and valve-cylinders rebored. The valves and the valve-gear that drove them had to be adjusted together, according to rigid company procedures. During this process, the axle carrying the eccentrics which generated the elliptical motion of the valve-gear cranks were driven by rollers, which stopped it where every valve event occurred. The mark of excellence for a good valve job was a completely "square" exhaust, with the beats coming in a regular drum-roll.

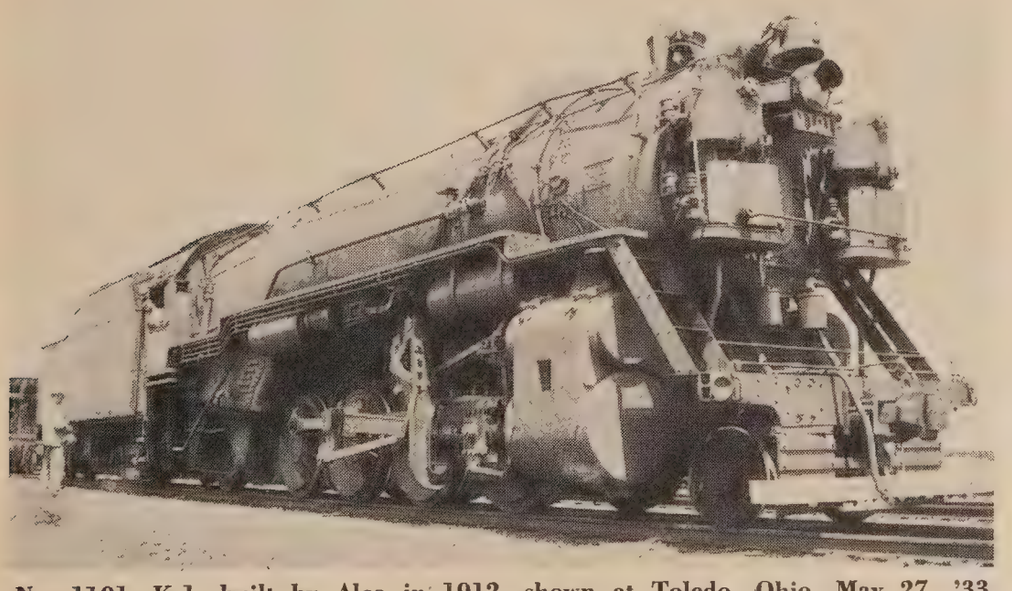
Pistons and cylinders likewise had to fit perfectly. Cylinders had to be rebored at intervals, which meant that the pistons were then too small. The newly-bored cylinder would be measured and a machine-operator was given the size. Thereupon he would turn out a new piston on a lathe. Minor wear could be countered by fitting oversized piston rings.

Pistons communicated with the wheels they drove by means of the crossheads and crosshead guides. When crossheads needed repair, the engine would be rolled to a ready track, and the crossheads and crosshead guides removed. The crossheads—the sliding members which connect the piston-rods to the front end of the main rod—would be measured, and the guides built up with Babbitt metal and then planed down to fit.

The main-rods connected to the side-rods; the latter drove the driving wheels. All had to be counterbalanced with big counterweights on wheels with crank-pins or small counterweights on the ones without crank-pins. A poorly counterbalanced wheel would hit the rail a hammer-blow at every revolution and could kink track by the mile or even derail a train.

One or two men did all the counterbalancing, which called for a fair knowledge of mathematics. Flat spots on wheels, caused by panic stops or dragging brakes, could not be tolerated. This called for changing the steel tires, which were expanded off and shrunk on with the aid of propane heaters which fitted around the wheels. The inside of a new tire would be machined to fit the wheel's diameter, while the tire's outside was machined down to match the smallest wheel-tire on the engine.

If necessary, tires could be changed on the road. A portable heater served



No. 1101, K-1, built by Alco in 1912, shown at Toledo, Ohio, May 27, '33.
Paul W. Prescott, 139 McKinley Ave., Conneaut, Ohio

to remove the old tire and shrink on the new one. If the wheel were slightly too big or too small, the spring-motion of the running-gear would take care of it until the engine got home.

The wheels ran in driving-boxes, where bearings kept the axles in place. Al Helwig joined the driving-box gang after the accident to his heel, and found that most of his work involved checking and changing bearings. Old-fashioned friction bearings, though simple, needed backbreaking work for frequent replacements. Crown brass had to be pressed out by hydraulic power, side-brass milled off, and new side-brass poured and machined to size. Then the new crown-brass was machined after being poured and pressed into place.

FRICTION-BEARING boxes had to be reworked completely. This required three times as much work as maintaining roller-bearings, whose advent made a big difference to engine power and serviceability. A simple example lies in the fact that friction-bearings had to be lubricated with cotton waste and grease, while roller-bearings ran in oil, whose level could be tested by the machinist's finger.

Routine maintenance called for the bearings in their cages to be removed and their clearances checked. It had to be exact to one ten-thousandth of an inch, corrected with spacer rings, and replaced. In a year and a half, Al never saw a roller replaced. A large engine equipped with roller-bearings could actually be pushed along by 20 or 25 men—try that with friction-bearings!

Fireboxes were outside Al's sphere, but he did work on automatic stokers. These were screws turning in guides which carried the sized coal from the C&O's private mines to the steam jets which spread it evenly over the grates. The screws wore out as time passed, and had to be built up by welders and then machined down to fit.

The steam generated by the boiler had to be controlled by throttles, also kept in shape by the machinists. It was mostly a matter of grinding and lapping throttle valves. By the time Al began work, leaky throttles were a thing of the past, although once an engine did take off by herself from her roundhouse stall and run through a brick wall, with thunderous exhaust.

Most of the machinists' work was done in the back-shops, although sometimes an engine would be doctored in the roundhouse and be gone again an hour later. Stays of three or four days to correct a bad-order engine were more common. What really took time were the periodical inspections required by Government rules. There were four classes: I, II, III, and IV. A class IV inspection called for reworking the running gear while leaving the boiler-jacket on. A class I job took a month, called for the removal of the boiler, and was a re-work of the whole engine.

Constant maintenance helped to keep motive power alert. In the glory days, the average steamer had an active life of forty years and ran a million miles; engines were scrapped for obsolescence, not for wearing out. Sometimes obsolescence came fast.

One type of engine that Al didn't work on, although he wanted to, was the big steam-turbine that the C&O introduced in 1947 to pull the *Chessie* between Cincinnati and Washington. The three locomotives that were built —500, 501, and 502—were the largest rail passenger-haulers ever built. Their 6000-horsepower turbines drove DC generators, which in turn powered the wheels. Although impressive to look at, their performance was so poor that they lasted only three years. A big drawback was their poor draft, caused largely by the ash residue from the powdered coal burned on the grates. The ash would build up in the front end and choke the fire, hampering steam generation and cutting power.

Al Helwig moved from one job to another during his service, finally specializing in air brakes. At intervals, however, he turned his hand to other tasks. Although strong and wiry, he was never large. His size came in handy when it was necessary to install receiver pipes, the big pipes that carried steam to the rear cylinders of the Mallets.

To get at them, you had to crawl into a confined space beneath the big boilers, above the articulating pin that joined the two engines together. Then you bolted the receiver pipe in place with an impact wrench, a huge compressed-air-driven tool that normally took two men to operate. Al would crawl under the engines, fit the impact wrench over the big nuts, and hold the wrench in place while his helper handled the controls that did the actual tightening.

OUR HERO loved the big engines he worked on; but in time they, too, faced extinction by the diesels that were too much even for the turbines. The Mallets were more powerful. However, no diesel had to be fired up hours before it was needed. Instead, it was turned on with a key, like highway trucks. It needed no water to be evaporated and blown out the stack. Fuel was carried in tanks that hugged the rails, lowering the center of gravity.

As a result, and because diesels had no pistons driving the wheels, they did not nose back and forth or gallop up and down the way steamers did. Furthermore, they could be linked up into multiple units, all under one man's control, while each steamer needed a crew to tend her coal and water. Diesels had dynamic braking to take the wear away from brakeshoes. Modern economics were too plain, so the steamers died. And when they died, they killed Al's job. Steamers needed machinists; diesels need electricians.

Ironically, Al helped with the farewell rites of steam engines. After the big Mallets and Mountain types had received their final tenderfuls of C&O coal and then dumped their fires for the last time at Huntington, many of them were sold to Mexico. They were hauled away in trains, where their own brakes had to respond to the commands of the engineer in the diesel locomotive pulling them as if they were cars in a train. Al's last job was to modify the brake systems to do this, which mostly meant blocking off part of the engines' brake system.

Then, in fours and fives, they were hauled south to the bluer skies of Mexico. After they clanked over the switch points south of the border, a Spanish-speaking machinist would undo the work Al had done, and with Mexican coal in their bellies they would be fire-breathing kings of the rails again for a few more years. To quote a trite phrase, they'd be living on borrowed time.

As each steamer at Huntington went into retirement or exile, a new list of machinists no longer required to maintain engines no longer running was posted on the bulletin board. Finally Al Helwig's name appeared on the list.

A RACE TO THE SWITCH, by Bert Lanning

ONE August day in 1928 a regular Canadian Pacific freight, No. 86, eastbound, black-smoked its way up the steep grade toward Greely, B.C.—a remote siding about halfway between Revelstoke and Golden—where it was due in less than an hour for a meet with an extra west. The blackness of the smoke blasting out of the stack of the big 4-8-2 locomotive was due partly to scoopfuls of sand that the fireman fed into its firebox in an attempt to clear the flues of their accumulation of soot and partly to the necessity for feeding a heavier-than-usual supply of oil into the firebox to keep up a good head of steam. As the Mountain type was nearly due for shopwork, the locomotive foreman had decided to send her out for one last trip before shopping her.

Glancing at his watch, the hogger noted with satisfaction that they would arrive at Greely in plenty of time for him to check over his engine. He could hear side rods clanking from lack of grease as they thundered through a long snowshed.

Despite the condition of her flues, the huge engine continued her steady climb as the fireman manipulated the oil controls to keep the steam pressure close to normal. When the Greely mile-board showed ahead, the hogger reached for the whistle cord to give the usual long, single blast. Soon they were approaching the west end switch. As the grade leveled off, he swung the Johnson bar back toward the center notch. As the deep-throated exhaust changed to a softer tone, the fireman reduced the heavy flow of oil and cracked the blower a half-turn. Then, seeing that the water-glass registered three-quarters full, he shut off the injector on his side of the boiler. While entering Greely siding from the west, head-end crews had an unobstructed view; but it was a different story for trains entering from the east. There, the main line came through a high rock cut that was curved enough to prevent crews from seeing anything ahead until they were through the cut and practically on top of the siding's east switch, which made it imperative for westbound trains to come through the rock at slow speed if they had a meet.

Naturally, with no "meet" at Greely they'd simply highball right through! In those days that section had no block signals. As the long freight drew near the east-end switch, its hogger made a heavy reduction on the trainline air to bring them to a grinding stop. Then, after closing off the lubricator and setting the independent brake, he dug into his toolbox for a wrench and a stick of bearing grease. With these and his long-necked oil can, he climbed down to go about his routine task of oiling up and checking around.

A few minutes later, as the fireman sat relaxed on his seat, contentedly munching a ham sandwich, the young, stocky, head-end brakeman dropped down into the cab from the tender after making his way up from the caboose. He had gone back for a bite to eat while they were climbing the grade.

Seating himself on the comfortable engineer's seat, he grinned at his companion and said: "You should go back to the crummy and try some of that stew. The skipper cooked it. It's good."

The fireman swallowed the last bite of his sandwich. "Yeah, I know. You guys have it all over us when it comes to grub! But I still wouldn't trade jobs!"

The fireman nodded understanding and reached into his lunchbox for another sandwich. The occasional *thurump* from the air pumps plus the sizzling sound of burning oil in the firebox made him contented with his own job. These 5800's were a fireman's dream as long as they received regular maintenance, such as cleaning out the flues. They all came under the category of free steamers and were powerful enough to start out from the yard with a full tonnage of freight with no assist from a pusher. The safety valves on the boiler dome were singing a merry song that suddenly changed to an ear-splitting roar.

The fireman reached over and pulled on the injector. In a short while the pops closed. Now that it was possible to resume conversation, the brakie guessed it was about time he walked up to throw the siding switch. But as he got off his seat, the two men were startled to hear a series of short sharp blasts from a locomotive whistle. From the cab window they viewed a sight that galvanized them into instant action.

Rolling out of the rock cut and bearing down on them at high speed was what had to be the extra west, running from Field to Revelstoke. The fireman and the head-end brakie realized in a flash that for a train to be making such a speed toward Greely must either be out of control or had no order for a meet there. Whatever the reason, both men knew this was no place to linger. They hit the ground in single leaps. The fireman, seeing the hogger run up from the front end of the locomotive, joined him to head for parts unknown.

As they ran, the fireman glanced back, fully expecting to see Thompson hot on their heels; but he wasn't there! He was sprinting toward the oncoming freight! Obviously he would try to divert the speeding extra into the passing track. The fireman and hogger, figuring they were far enough away for safety, stood spellbound as they watched that dramatic race to the switch. They could see it was going to be close. The brakie, young and fleet of foot, had made it to the switch seconds before the extra's engine; but before he had time to unlock and throw it, the thundering locomotive swept past! And with brakes screaming in protest from an emergency application, it slammed into the engine of No. 86!

The head crew on the extra west's engine had jumped clear when they saw the waiting freight and noted that the siding switch was still lined up for the main. The hogger meanwhile had given the warning blasts on his whistle and thrown the air into emergency. But Orville Thompson went to glory. His body was found later in the jumbled mass of wreckage, crushed by a load of lumber tossed from a flat car.

At the official investigation it came out that, due to negligence on the part of an operator, the extra had never received a meet order for Greely siding. And as eastbound trains were classified as having "superior direction," No. 86 was entitled to hold the main line that fateful day. It was also proved by testimony from the extra west crew that the hogger on the extra had given the prescribed whistle signal at the Greely mile-board. Evidently, the opening of the safety valves on 86's engine had drowned out that warning to its head crew. The two engines involved in the wreck were practically welded together, so powerful had been the impact; but both were eventually repaired, at heavy cost. ●

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Steam symphony: Union Freight Railroad engine is seen on Atlantic Avenue in Boston, Mass., on Aug. 31, 1935, three years before elevated line was closed.

Russell C. Joslin, 8431 E. Edgemont Ave., Scottsdale, Arizona 85257

STEVE MAGUIRE'S

TRANSIT TOPICS

BAY AREA Rapid Transit's new line between Oakland and Tremont, Calif., was closed to the public for about two hours one day last fall so that President Nixon and his wife could ride it. Shortly before noon, the Nixons landed at Oakland Airport. A pilot train was already headed for Oakland. When the visitors reached the station platform, cars 120, 505, and 119 showed up and the Nixons boarded 120, escorted by BART's general manager, Billy Ray Stokes.

Starting at 12:37 p.m., the train accelerated to 60 miles per hour, but slowed down to 36 mph at Coliseum and Fruitvale stations. Also aboard were operating supervisors Bill Breiner and Lee Washburn, maintenance superintendent E. M. Gregerman, and supervisor Matthew, who called out the stations and explained the train operations. Upon reaching Lake Merritt, the riders got off. Elevators took them up to the floor where the central computer is. The visitors inspected it. Seated at the control console was Carroll Shepard, who had monitored the special train and was now putting the railroad back to normal operation. As Nixon left, after patting Shepard on the shoulder, he announced a $38.1 million grant of taxpayers' money to BART. So says the *Bay Area Electric Railroad Review*, monthly journal of Bay Area Electric Railroad Asso., San Francisco. No figures are available on how much money the special train cost the public.

BART had been operating barely a month when it was called upon to carry thousands of baseball fans to and from the Oakland Coliseum during the World Series games in October for them, it extended its normally limited daytime operation until one hour after each game. At the same time, AC Transit ran connecting shuttle buses every five minutes between Coliseum station and the Coliseum itself, with free bus transfers.

Opening of BART's Richmond and Concord routes was delayed for six weeks because of tests on new cars made necessary by a defective control oscillator that prevented a train from stopping at a terminal in October.

Although Oakland's two downtown stations have three levels beneath Broadway, they possess none of the atmosphere of eastern-style subway stops. MacArthur-bound train from Fremont unloads on middle level of 12th St. City Center Sta.
Harre W. Demoro, 3040 Jordan Rd., Oakland, Calif. 94602

Elsewhere on the news front, BART has ordered from Rohr Industries of Chula Vista, Calif., 100 more rail transit cars plus two options of 100 cars apiece. The order involves about $37 million. If both options are exercised, another $74 million would be added to that figure. Rohr is currently building 250 cars for BART under a 1969 contract. Production on the new order will begin next summer. It was made possible by a $27 million Federal grant presented at ceremonies dedicating the nation's newest transit system.

BART highlights the importance of pre-planning a modern system. Years of preparation are bearing fruit—from the complexities of laying the world's largest underwater tunnel to the installation of more than 500 public coin telephones in 34 stations along a 75-mile route.

"We're planning our communications system for the year 2,000," explains Robert Brennan of the Pacific Telephone & Telegraph Co., "and this one for BART happens to be the biggest of its kind in our company's history. Apart from that, all BART coin phone installations have been custom-designed to harmonize with the decor of each station."

In Berkeley, the community voted to have its phone network built completely underground, even though this meant much more expense. Elsewhere, the system is one third underground, one third elevated, and one third at street level. The MacArthur station in North Oakland is likely to be one of the busiest on the rail network, since it will be a key transfer point. Its passenger area was designed with an attractive blend of tile, ceramic facings, burnished metals, and natural woods. The phones are flush-mounted wall units, divided by partitions. At other stations, the coin telephones blend

SEPTA car No. 2120 at end of line, 61st Street and Baltimore Avenue, Philadelphia, about 11 p.m., October 26, 1972.
Gary G. Allen, 215½ E. Palmer Ave., Glendale, Calif. 91205

flush into the walls without dividers, or stand out in central areas in the shape of "trees"—a quadrangle-shaped unit on a single post which allows four people at a time to make calls.

Every BART station has one phone specially designed for the handicapped. These are mounted halfway down the wall from the standard installations and are easily accessible from a wheelchair. Their low position also makes them ideal for children to use. And at each installation, one phone is modified with a volume control unit for persons hard of hearing.

NEW YORK subway riders, packed with almost incredible density into rush-hour accommodations, can endure their fate more stoically now that work on the much-talked-about 2nd Avenue line in Manhattan has actually been started. Ground-breaking ceremonies were held last October 26th at 103rd Street.

"It's no longer a planner's dream nor an unfulfilled political promise," says William J. Ronan, chairman of the Metropolitan Transportation Authority. The new route should carry its first passengers in 1980 and transport more than 50,000 during peak periods over 14 miles of double-track subway between east 180th Street in the Bronx and the southern tip of Manhattan. It is estimated that the total cost of construction will be $1 billion, the funds to be derived from the 1967 transportation bond issue, Federal grants, and state and city funds.

There will be a train interconnection under east 63rd Street and 2nd Avenue with the 63rd Street crosstown line between Queens and Manhattan. This will enable 2nd Avenue trains to switch to and from the 63rd Street line to provide service from the Bronx on the Avenue of the Americas line and the BMT-Broadway subway.

Trains from Queens will be able to use the 63rd Street tunnel, construction of which is now in the final stages, to the 2nd Avenue line to provide service from Queens to lower Manhattan, or to the Avenue of the Americas line or the Broadway BMT.

The other day, U.S. Transporation Secretary John Volpe rode into town, dug into his mass-transit funding bag, and gave the city a cool $40 million to

Iowa Terminal RR. passenger car 102 (ex-Chicago North Shore & Milwaukee) stands beside electric locomotive 54 (ex-South Iowa Railway) at Emery Shops near Mason City. New shops were built in 1970 after a fire destroyed old barn.

Photograph by Stephen D. Maguire

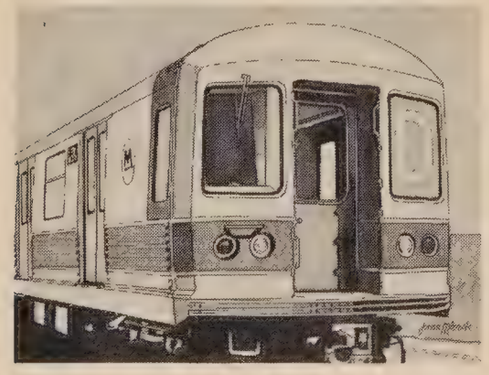
help buy 202 subway cars. It was the second huge Federal grant to New York for underground travel in two months, the previous one having been nearly $63½ million, also for subway cars. The combined grants cover two-thirds of the cost of 522 cars. MTA needs a total of at least 750 new rail transit cars, all R-46's. The older R1 through R-9 cars are subject to frequent breakdowns. The new R-46's will be quieter and more efficient. They combine the latest in technical and safety features, passenger comfort, and pleasant interior design.

Meanwhile, the General Electric plant at Erie, Pa., is working on an order for propulsion and control systems for 750 new Pullman-Standard cars for New York subways. This contract is said to be the largest U.S. subway car order in history. Total number of cars may eventually reach 900. As the new ones are shipped to New York, they will replace older equipment still in service.

The city's entire fleet of new R-44 subway cars was quietly withdrawn from service the other day, over a week-end, to check for and adjust a mechanical defect which, it is said, could have caused a serious tunnel accident. A routine inspection of some cars on the Independent Division revealed that three of the four bolts used to secure the air-conditioning units to each car had worked loose. If the fourth bolt also had become unfastened, the cars could have jackknifed. Several other cars were shown to have the same trouble, so all of the 170 new ones on the IND Queens line were sent to the Coney Island repair yard. Some 200 pre-World War II cars awaiting the scrap heap were ordered back temporarily into service. After the inspection, the new equipment was returned to duty.

Watercolor painting by Jonas Mlenak, 840 E. 8th St., Brooklyn, N.Y. 11230

New York City subway car, class R-44, an air-conditioned, 60-foot car built by St. Louis Car Division of General Steel; began service in fall of 1969.



THE HOURS for senior citizens riding at reduced fare on Chicago transit lines were expanded to 24 hours a day, seven days a week, effective last November 5th. Basic fare for the oldsters is 20 cents, with an additional dime for a transfer. New York City's cut rate for citizens over 65 applies all day Saturday, Sunday, and holidays, but on other days only during the non-rush periods between 10 a.m. and 4 p.m. and between 7 p.m. and midnight. Will readers please tell us how these hours compare with those in their own cities?

THE FUTURE of the Duquesne Heights Incline railway at Pittsburgh, Pa., is endangered by the construction of a new apartment house adjacent to and above the Grandview Avenue station, reports the well-informed Jim Cerny of Pittsburgh. The Incline is owned by the Port Authority of Allegheny County but has been operated since 1964 on a non-profit basis by the Society for the Preservation of Duquesne Heights Incline.

David H. Miller, president of the Society, points out that the proposed multiple dwelling would jeopardize the safety and regularity of Incline operation, would open the gates for other real estate firms to erect high-rise buildings along Grandview Avenue, and would do irreparable, long-range harm to the appearance of Duquesne

Oregon Electric train waits at the station in Eugene, Oregon, sixty years ago.

Collection of C. W. Jernstrom, 822 Pelham Drive, Fort Wayne, Ind. 46825

Inbound trolley enters downtown Pittsburgh, Pa., on Grant Street in July '72. Outbound car is headed for Mt. Lebanon.
Ron Karr, 36 Sweetgum Road, Levittown, Pa. 19056

Heights and the cliff's ultimate stability. Furthermore, he maintains, the project is inconsistent with the city's master plan for that area.

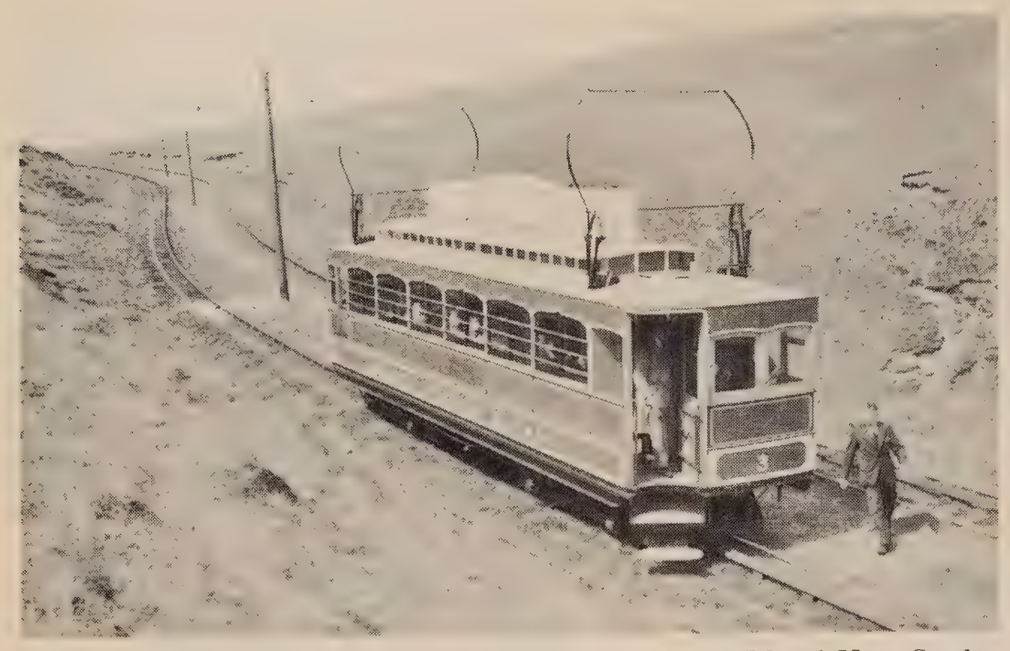
"We feel strongly that the Incline would not survive under such conditions," he wrote. "The Society should consider buying the property underlying Grandview Avenue Station. Unfortunately for the little railway, when the Duquesne Inclined Plane Co. sold the road to the Port Authority in 1964, it retained the right to build over, under, and around the upper station—a situation over which the society has no control.

AMERICA'S first Personal Rapid Transit System (PRT), which may revolutionize public transportation in congested urban areas, was dedicated on October 24th in Morgantown, W. Va. When completed, the new system will connect two university campuses and the Morgantown business district by 2.2 miles of two-way concrete guideways. Over these guideways will run small, automated, pollution-free cars capable of moving 1,100 passengers every 20 minutes. The cars are personalized to the extent that they can be summoned and directed to the desired destination by pushing a button at the station at which a passenger boards. The service will be available to anyone, but the principal patronage is expected to be by students.

A FEDERAL GRANT of nearly $33 million, made by the Urban Mass Transportation Administration, will help the Massachusetts Bay Transportation Authority to buy more than 150 new streetcars for its Green Line transit system in Boston. It will, in fact, pay two-thirds of the total cost, $49.2 million. Local MBTA bonds will provide the rest. The combined funds will be used to buy from 150 to 175 articulated trolleys as well as a related parts inventory. MBTA will replace its current fleet of worn-out streetcars. Last February, you may recall, UMTA granted $25.5 million to help to upgrade tracks, signals, power stations, and maintenance facilities of the Green Line.

SAUL BELLOW, one of America's popular novelists, recalls his boyhood days in Chicago as follows: "The huge red streetcars with their cane seats yellow, swayed and clanged on North Avenue, kids hitching rides on the back while the conductor yanked his rope and the motorman hammered his footgong. The scrap paper flew like seagulls in the wake. . . ."

FLAG CANCELLATIONS on streetcar RPO's were discussed in an illustrated article by William J. Bomar in the November '72 issue of the Bulletin of the Post Office Society's Northeastern Chapter, edited by Michael



Snaefell Mountain Ry. No. 3 climbs mountain near Laxey, Isle of Man. Car has history that goes back nearly 70 years. Note the unusual overhead collectors.

Photograph by J. H. Price

Jarosak, Box 192, Stormville, N.Y. 12582. The article originally appeared in *Linn's Weekly Stamp News* years ago.

CAPE MAY, N.J., manufacturing and testing facilities of the Monorail Division of Westinghouse Air Brake Co. have been sold to Rohr Industries, Inc,. of California. WABCO states: "We will maintain a market profile in the small people mover system very much like we do in the railroad and mass transit markets. We will design, build, and install signalling, control, communications, and braking systems, for both small and large transportation systems, no matter who the carbuilder may be."

Rohr has a growing involvement in the manufacture of transit vehicles, including BART system cars, the Washington Metro cars, and buses. The Monorail Division employs about 50 people and engages in the design, building and installation of small fixed guideway transit systems for recreational and commercial applications such as zoos, urban centers, and airports. The WABCO Monorail is a rubber-tired, lightweight, electrically-propelled vehicle operating on a concrete or steel track. It may be elevated, underground, or on the surface.

A new 32-page brochure, *People Mover Control Systems*, may be had free by writing to WABCO Signal & Communications Division, Marketing Dept., Swissvale P.O., Pittsburgh, Pa. 15218. Ask for *Bulletin 283*. It describes a "building block" system by which planners and designers can use a variety of operating methods ranging from block signaling with wayside signals and trip stops, through cab signaling and overspeed protection, to fully-automated, crewless train operation.

Unique man-powered tourist tram at Atami, Japan, a resort on shore of Sagami Bay, south of Yokohama. Tram is believed to have existed from 1895 to 1911.

Collection of Stephen D. Maguire

WHO CAN IDENTIFY an unusual glass electric insulator? asks Gerald Brown, Drawer 1, Two Buttes, Colo. 81084. Our correspondent collects insulators, both glass and porcelain, telephone and telegraph. But the unusual one is glass, with the name *Fisher Electric Railway System.* We know of no railway with this name. Perhaps you can help.

Canada Heard From

AN EFFECTIVE way to influence public opinion in favor of rail transit is writing short letters to your local newspaper. We say "short" because journalistic space is sharply limited. A rare exception to this rule was the very long letter which Ross Snetsinger of Toronto, Canada, had in *The Toronto Star* the other day. Excerpts follow:

I am distressed by the shallowness of thinking that went into the recent Toronto Transit Commission report recommending the conversion of several of the city's remaining streetcar routes to buses.

For too long, in North America generally, mass transit has been allowed to fall far behind in expansion and technological development, thanks to misplaced economic, cultural, and industrial stress on the automobile.

TTC apparently is unmindful of pollution. Instead of replacing steady, clean, quality rail transit with buses, why not improve the heavily travelled streetcar lines by continuing to maintain tracks, and rebuilding and buying new trolleys?

Consider the high degree of flexibility and some advantages of the electric rail transit vehicle:

—Trolleys historically have come in all sizes from small feeder line four-wheelers to heavy-weight multiple-unit urban, suburban, and interurban models. They can be open, closed, convertible, or doubledecked.

—Electric rail cars provide a smooth steady ride—depending, of course, on track maintenance.

—Trolleys can use pole, pantograph, third rail, or cable. They can negotiate steep grades, sharp curves, and complicated trackwork with quiet ease.

—Trolleys can run slowly to conform with street traffic situations or operate on private right-of-way at 80 miles per hour.

—Trolleys can operate in the center of the street, at the side of the road, in the median strip, in a subway, on an elevated structure (monorail style), on conventional private right-of-way, railway tracks, on a one, two or four track line, or any mixture of the above. Boston streetcars operate on the surface in residential areas, and below ground-level in the central core.

—Trolleys have been modified to carry mail, express, baggage and freight and have even been used as mobile libraries, to flush streets, and to transport the dead.

—Trolley lines such as the former London & Port Stanley Railway could interchange freight and passenger equipment with steam roads.

—As far back as 1930 the Lake Shore Electric operated piggyback service.

—The Illinois terminal line in 1910 had sleeping-car and parlor-buffet-observation-car service. In 1920 the Milwaukee Electric Railway had luxurious coach-diner articulated units.

—Trolleys do not require large areas of smooth pavement, salt, or anti-freeze. In general, trolleys appear to provide maximum comfort and convenience with minimum environmental damage and at reasonable cost.

Foreign Transit Lines

BRAZIL celebrated 150 years of independence last September 7th. One of the gala events was the Metropolitan Sao Paulo Co. running its first two subway test cars over two miles of underground line in Sao Paulo. This is part of the first route that will be operating in three years. It runs north-south and, when completed, will be 13 miles long. Later on, three additional routes will be built, bringing the total mileage to 42, writes Robert Torbett, P.O. Box 3585, St. Petersburg, Fla.

BECAUSE of smog that made hundreds of school children ill, Tokyo has banned automobiles from the city's downtown area during morning rush hours and is working on a plan for even more stringent actions to limit auto traffic in the world's largest city. As we all know, Tokyo has a non-polluting monorail line that is well patronized.

The governor of the Japanese capital, Ryokichi Minobe, called together police officials to explain plans that would call for massive police action to prohibit auto traffic when Tokyo smog formations begin to reach dangerous levels. Tokyo has a major air-pollution problem. For some time it has banned auto traffic on weekend shopping days in the Ginza, the main shopping area. The Ginza ban was designed to reduce air pollution and create a more pleasant environment for shoppers. It not only dramatically reduced air foulness but also pepped up business.

LONDON TRANSPORT, which runs both buses and underground trains in the British capital, also has a successful consultant business. Recently, three senior LT officials returned from Bombay, India, after developing a plan for a new rail transit system there. London Transport likewise has obtained its third major contract in the United States—eventually to help reorganize bus services in the area of Washington, D.C., after the Washington Metro is opened in 1974. (Its other two contracts were with the U.S. Department of Transportation to survey transport problems in some American cities.)

In Hong Kong, the preliminary go-ahead has been given for an underground railway for which London Transport helped to prepare the feasibility study.

Despite a 3.25 percent increase last September on all of its fares, LT is likely to have a 1972 deficit equivalent to about $13 million in U.S. money. Under the Transport (London) Act of 1969, it is not allowed to operate at a deficit and, up to now, has never done so. Several ways are suggested to put LT in the black. One is a proposed lottery, the revenues from which would be plowed into LT funds. If this should materialize, it might be the world's first lottery specifically designed to help pay for public transport. In any case, London must be one of the few cities not permitted by law to run at a deficit. Do readers know of any others? asks Albert Herskovits, former associate editor of *Railroad Magazine* and now our "man in London," 3 Bel-size Square, London NW 3, England, who sent us this news.

New Electric Publications

Change at Park Street Under: **The Story of Boston's Subways, by Brian J. Cudahy, 64 pages, 6x9″, with hard cover binding, may be had for $4.95 from Stephen Greene Press, Box 1000, Brattleboro, Vt. 05301. This book's publication coincides with the 75th anniversary of the opening of the world's first subway line—at Boston, Mass., on Sept. 1, 1897. On that day an open trolley of the Boston Elevated Railway made its inaugural run from the street and down the Public Garden incline into Tremont Street subway, to deposit passengers under Boston Common.**

The author, a philosophy professor at Boston College, has more recently been working as a consultant to the present Massachusetts Bay Transportation Authority and at the same time has delved into old company records and files to produce a relatively short but concise story of the Boston underground (and elevated) system. There is plenty of background material on the building of various subway lines in later years, concluding with the opening of the South Shore extension on Sept. 1, 1971, exactly 74 years after the line to *Park Street Under* was opened. Included are contemporary photos, maps, and an all-time roster of subway and subway-surface equipment.

The Interurban Railway & Terminal Company "Black Line," **20 pages, 6x 10″, with stapled soft cover, may be bought for $1.50 from the author Stephen B. Smalley, 6129 Glade Ave., Cincinnati, Ohio 45230. This booklet is a collection of anecdotes, most of them accompanied by car photos. The centerfold is a copy of an old IR&T timetable, additional copies of which can be had for 25¢ each.**

To save time, send *Transit Topics* mail directly to Stephen D. Maguire, P.O. Box 51, Belmar, N.J. 07719.

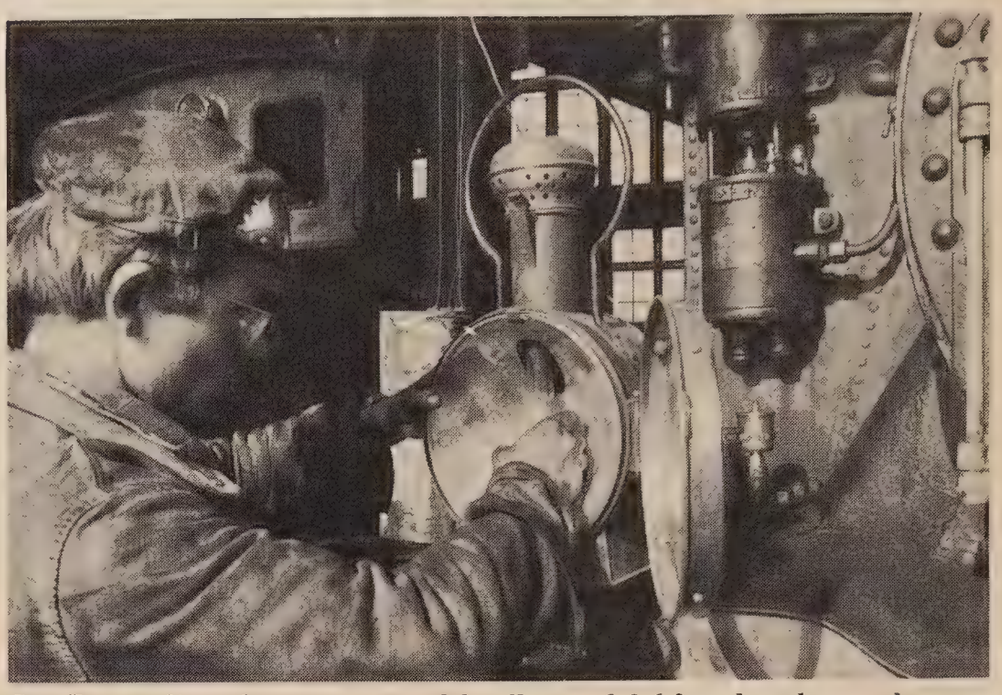
Steam Is Dead in France . . . Long Live Steam!

Photographs by Madeleine de Sinety; words by Dan Behrman

JUST as SNCF, the French national rail system, was phasing out its last steam locos, railfans began to preserve the survivors. They took over the old engine terminal at Longueville, 50 miles east of Paris. Sponsors of this French equivalent of Steamtown (they haven't decided to call it Vapeurville) set up the AJECTA. This is not a way to get water into a boiler but an acronym for *Association de Jeunes pour l'Exploitation de Chemins de fer Touristique et d'Attraction.*

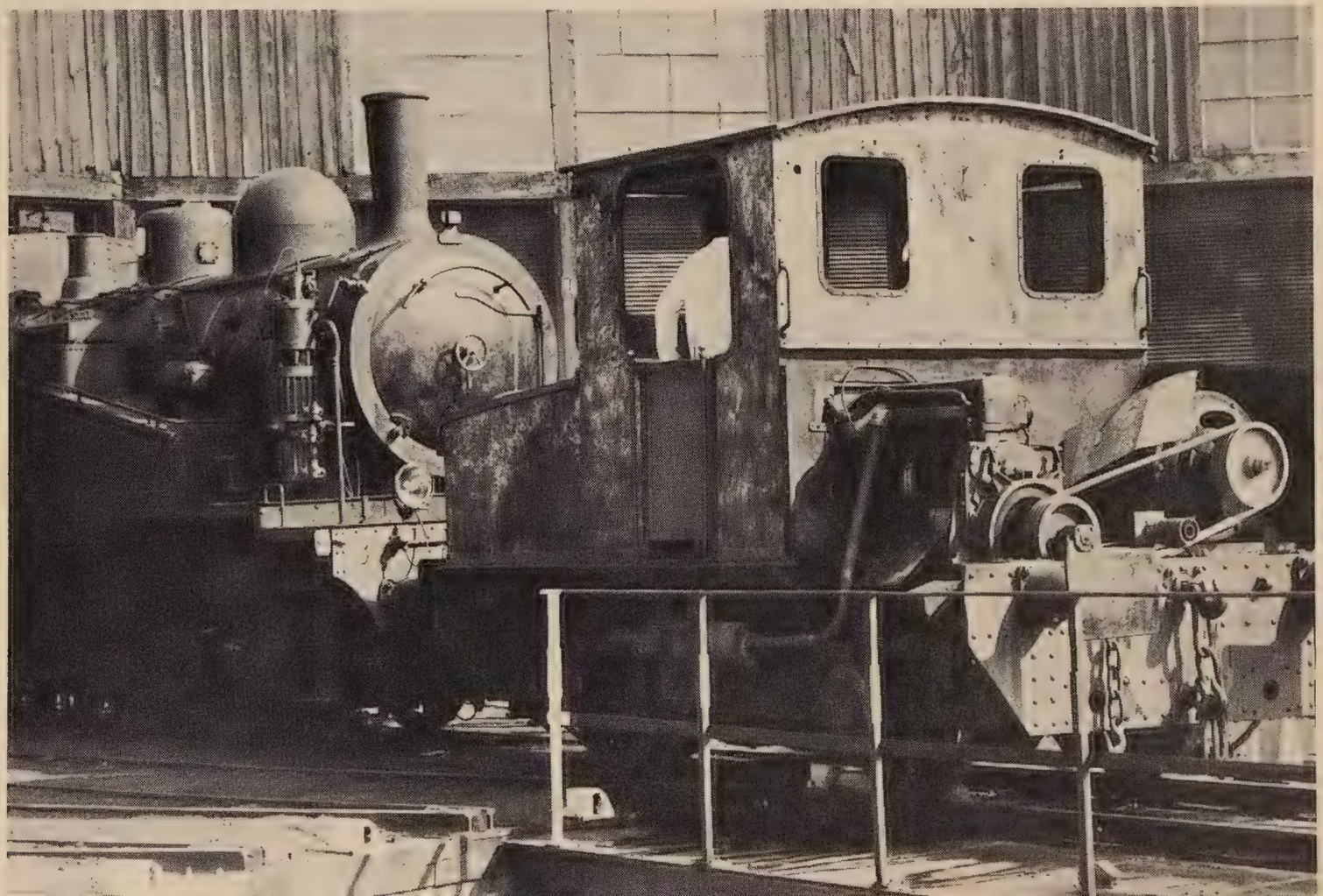
Last September 30th was a big day at Longueville. Three of the group's engines were fired up in the aged wooden roundhouse, then moved down to Longueville station, where they awaited the arrival of what was heralded as the last SNCF steam excursion, a trainload of fans who had come from Paris behind 230-G-353, an old Ten-wheeler.

Madeleine de Sinety (5 Boulevard Edgar Quinet, Paris, 14e, France), whose photos are already well-known to *Railroad Magazine* readers, was on hand with her camera for the festivities.



Guy Remy adjusts kerosene-powered headlamp of 0-6-0 tanker that used to run on branch line between Gudmont and Rimacourt in eastern France and then wound up in beet-sugar refinery before she was rescued by the steam fan organization.

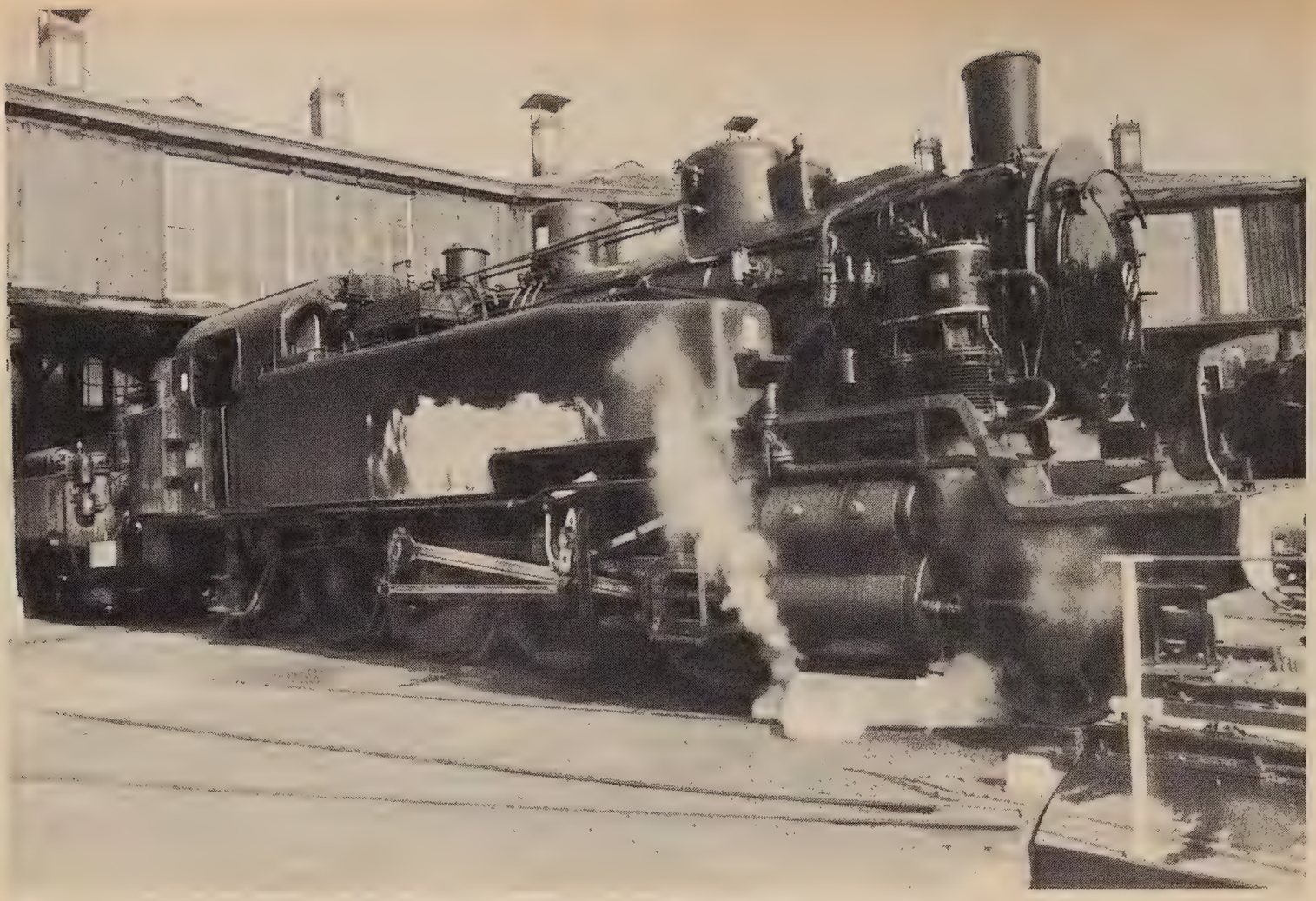
Longueville yard goat (right) is a Jeumont-Schneider electric loco, originally powered by batteries but converted with the help of a gasoline engine, a generator, and a lot of ingenuity. We see her on the turntable with 0-4-0 No. TA-137 and a veteran 0-8-0 switcher that used to work out of Le Mans engine terminal.



Remy pitches wood into cab of 141TB 407 before building fire in her. The 2-8-2 tanker spent years on suburban runs between Paris and Boissy-Saint Leger and later worked a branch line.

Aged 85 years but still chuffing away, this 0-6-0 sits on a weedy sidetrack. Observe the unusual safety-valve arrangement installed behind her boiler dome.

A triple-header eases out of the engine terminal for the quarter-mile run to Longueville station. (Left to right) We see No. 141TB-407 doing all the work, 0-4-0 No. TA-147, the valiant little 0-6-0 and a one-car train, AJECTA's old dining car that is now being restored with its once-magnificent mahogany paneling. On excursion runs the diner is hooked up to SNCF rolling stock and is used to serve box lunches to traveling fans.



Resplendent in all her glory and polished brasswork, No. 141TB-407 pulls out of the old wooden roundhouse. These engines ran push-pull on commuter trains. On the way out of Paris, loco and crew were at the head end, but on return trip were at the other end.

No. 141TH-407 highballing on the mainline. Madeleine took this picture from inside a gasoline-driven inspection car that runs with an engine from an old Peugit 203 sedan.

As soon as the train stopped, Madeleine rushed into the cab of the old Ten-wheeler to get this dramatic shot of a regular fireman at work, pouring coal into the firebox of a steamer on the mainline for the last time.

Madeleine got this shot as the engineer opened his throttle on No. 230-G-353. But the steamer didn't pull out. Instead, the excursion train had to go into the hole for a freight. When she moved again, reports Serge Vitry, the French engineer who wrote an article for our Dec. '72 issue, "the lad started her hard and fast. He had five cars, over 200 tons. As the train passed the three AJECTA engines on the sidetrack, the fans blew their whistles all at once. One of them caught the operation on a tape recorder and when she was out of sight, her red lights gone, he played the record for our enjoyment."

Trackside in the Diesel Age

DID STEAM ENGINES REALLY OUTLAST DIESELS?

By
ELLIOTT KAHN

From an original etching by Otto Kuhler, 625 Camino Rancheros, Santa Fe, N.M. 87501

RAILFANS in general seem to think that diesel power just doesn't stand up under pressure like the steam power it replaced and the average diesel locomotive doesn't last as long as the average steamer.

"Look," they tell you, "the Southern Pacific is scrapping some diesel units after only seven years of service; but back in the 1950's it was operating steam engines built more than half a century before."

This is true. However, you might be hard put to find a single part in those old steamers pulled out of service that belonged to the original engine credited with that same number and builder's date. In fact, the engine even looked quite different on her birthday. As a rule, steamers lasted long because they were rebuilt when they became worn out, sometimes again and again over the years.

Diesel fans also might be surprised to learn that their pets are quite aged, too, after seven years and they stay in service only because of rebuilding.

You don't hear much about Southern Pacific steamers like the so-called "pride of the road," GS type 4-8-4's numbered 4460-4469. Built in 1943, they began going to the scrap pile in 1954, only 11 years later, and all were gone after 12 years. Nor is it commonly known that the SP's first diesel, No. 1000, an SW-1 that General Motors built in 1939, is still running, though now in California as Holly Sugar No. 1, some 34 years later!

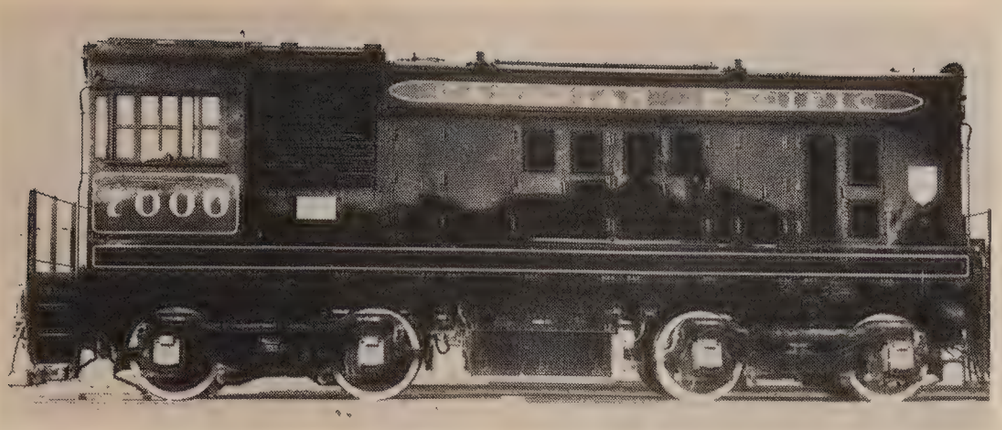
Surely you've seen pictures of *El Gobernador,* the experimental steam loco which, when built by the Central Pacific in 1883 as a 4-10-0, was the world's largest locomotive. But did you know she was reduced to scrap iron 11 years later, and even then had been sitting around idle for several years before being liquidated? (Incidentally, to some extent the German-built diesel-hydraulic jobs which operated only seven years on the SP likewise were experimentals.)

By no stretch of the imagination could you call all steam designs successful. Up until 1949 the SP did continue to use some of its 4-8-0's that dated back to 1882. Others, outshopped in 1892, endured until 1953 (the year *Railroad Magazine* acquired its present page size). Even so, most of these locos were changed from time to time. Some had been built as compound engines, as coalburners, and through their lifetime not only were rebuilt again and again, but the process altered their weight or gave them smaller drivers. In getting new boilers their boiler pressure was increased, as a result of which tractive effort rose by 25 percent.

Of the six TW-4's built in 1882, all except the one scrapped in 1935 lasted into the late 1940's. Checking back further in the roster, you will note that 12 such 4-8-0's were delivered in 1882, but half of them were done for by 1899, which was not an impressive showing. It may be surmised that in the rebuilding of the other units the dozen wornout engines with some new parts became six good ones.

Merely counting the number of years is no way to gage the service age of a locomotive any more than it would be with the family automobile. Most people buy new autos not because the old ones are dilapidated but because they are tired of them. Maybe your wife says she is ashamed to go to church in such a buggy, or friends and relatives have newer models and kid you about your old scrap-iron. Like it or not, the automobile is a status symbol. The average motorist trades in his car every three or four years.

Most truck owners, being more practical, keep their units working much longer, say seven to ten years, even though their mileage record is far in excess of the family car. Drivers of business or industrial vehicles are not interested in keeping up with the Jone-



CP's first diesel loco, built in 1936 by Stone & Franklin of Canada, Ltd., at Montreal, and National Steel Car Corp., Ltd., in Hamilton, Ontario. Weight, 245,000 lbs., length 43 feet, 10 inches, 600-hp diesel engine built in Ireland. Courtesy of CP Rail News

ses, but they do want to get full value out of a purchase. Often a truck is not rebuilt for the reason that the manufacturer has changed his model considerably and no longer produces parts for the old machine.

Railroads are in the same fix. Back in steam days they often made parts in their own shops. Now that is changed. They must depend upon outside suppliers. When needed parts become too scarce, motive power officials either dump the locomotive or rebuild it with more modern components. Some locos are practical to rebuild; others are not.

The average road diesel has rolled far more miles in 15 years of service than its steam predecessor did in 30 years. Many 40-year-old Consolidations and Mikes did well to run two million miles, but more than a few diesels have done six million miles in far less time. When you compare figures, the diesel does not come off badly at all. The average electric locomotive, however, outlasts both diesels and steamers.

Penn Central's last GG-1 was delivered in 1943 but is still pulling the same kind of high-speed train it did them. Some GG-1's now in service date back to 1935. Comparable steam power would be the famous Pennsy K-4s Pacifics. They were first built in 1914 as one experimental engine, but were not produced in quantity until 1917. Indeed, most of the Pacifics were built in the 1920's, the last one in 1928.

Probably today, with new loco improvements developing monthly and with railroad conditions changing, we shall not see so many 50-year-old diesels clattering around, even darned few 30-year oldsters. The diesel can be rebuilt and modernized like the steamer was. As this conversion is usually done at the locomotive plant, not by the railroads, we are now calling the rebuilt job what we may have termed the coalburner, a brand new engine. Quite a few of the F-7, F-9, and GP-9 units that you see in service were originally FT's or F-3's, rebuilt by using many old parts and some fresh ones in a new car-body. This is virtually the same as rebuilding a new engine inside the old body. Numerous roads replace motors, traction motors, trucks, controls, and even cab seats and glass. Years ago they replaced boilers, wheels, cabs, pilots, and tenders. If the old girl was given a different wheel arrangement, she was generally regarded as a "new" engine; otherwise she was not.

While many diesels have left the roster after 12 years or so on various roads, similar units may last 25 years on other roads. You could say that some roads have better mechanics, but the real reason is usually a lack of money to replace locos completely, or maybe the mileage or hours of use by one carrier is far less than on the other. Hence you see BL-2 units on such lines as the Bangor & Aroostook and Western Maryland, that are gone before their fifteenth birthday on the Missouri Pacific, for example. But on certain lines it is indeed the case of the right mechanic in the right place. Take the Frisco, for another example, whose Tulsa yard still uses F-M switchers 25 to 23 years old.

You might think that in Pensacola, Fla., a seaport where F-M motors work in marine installations, you would find more enthusiasm for such units than in landlocked Oklahoma (although Tulsa recently became a seaport). But you do not. The Frisco Line master mechanic at Pensacola turned down those engines with the curt remark that they were "just no good." He still prefers GM-powered units of the same age as the FM's, and both seem to give fine service.

Diesel fans can take heart in realizing that although GG-1 electrics hold the record for longevity in hauling top passenger runs in the U.S.A., diesels came closer than steam power did in matching this feat. In 1970, some Atlantic Coast Line (now SCL) units built in 1939 and 1940 were still hauling such great trains as the *Champion* and the *Silver Meteor* in Florida, as well as some local runs, and they still average over 70 miles per hour on these runs, just as they did when built.

Back in the 1930's, though many of their runs were taken over by the big 4-8-2's, M-1, the K-4s got a reprieve during World War II and headed (usually doubleheaded) the entire Pennsy steel fleet, while the 4-8-2's hauled freight.

New York Central Hudsons, some of the handsomest engines you'd want to see, were long regarded as standard power on mainline Central passenger trains. Actually, they spent only about two decades in such service. The first Hudson was built in 1927, the last in 1938. No matter when they began life, all were finished—even after pulling work trains—by the end of 1955. All fell short of their thirtieth birthday. Some were only 17 years old. But if you think that is a short time, consider the big Niagaras that knocked the Hudsons off first-class runs, beginning in 1945. They, too, were finished in 1956, some of them after less than ten years' service. Several Niagaras ran almost two million miles, as much as Central Mikes than highballed for 30 years.

Two decades was about the average lifetime for most steamers to handle the jobs they were built for. Large engines seemed to have shorter lives than smaller ones. The real reason why many steamers continued to run so long and were patched up year after year was money. Economic depressions of 1907, 1921, and especially the 1930's caused most roads to order little or no motive power.

When cash finally did roll in, we were involved in a war that made it hard to buy anything new. Much of our steam fleet of that period lasted

at least ten years longer than you might regard as normal. Many branches and other lines have been marginal performers ever since their rails were first laid. The minimal roadbeds they operated on usually meant light power or engines that cost little to allocate to such service. Despite all the steam-power development, there wasn't much all-out improvement in basic engine performance. The main surging-ahead of steam came with building superpower, but it came "too little and too late" to block the diesel.

True, some steamers hauled locals for much longer periods, occasionally pinch-hitting on the *Flyer*. The Fort Worth & Denver even had some Pacifics wheeling the *Texas Zephyr* on its last short spurt between Ft. Worth and Dallas, right up to 1954—34 years after the engines were built—but you can't be very impressed by a 60-mph run over a 35-mile stretch, when this same type of engine pulled the *Texas Zephyr's* predecessors over the entire length of the system some 21 years before a newer diesel knocked it out.

Readers may remind us that the last FW&D Pacific to run though was one built in 1910, and her last trip was in 1959—something no diesel has done yet. But the FW&D 501—on view today in a park at Childress, Texas—hauled freight for the last few years, and occasionally a passenger local. During her active season she was usually on a local after 1939, and often before that. She also sat around for several years, seldom running, because she was just back-up power. Toward the end, she even found service as a stationary boiler.

So for all practical purposes, her original purpose of handling crack passenger runs ended 29 years after her birth, even though she ran 20 years later in other service.

No doubt readers will point out that the FW&D F-7 units operated from 17 to 18 years before being replaced. It would seem that fast rollers of the diesel age have short life spans, like their steam counterparts, as the SD-7 units of the FW&D are now in their twentieth year of operation and still going.

Below is a sampling of years of usage for some steam and diesel locomotives:

Pennsylvania Railroad

D-16 class, 4-4-0, built 1895-1910, in service 1895-1950 (3 of 429 engines lasted 40 years. Average unit ran 29 years). One unit (816) galloped over 300,000 miles in three years and four months—quite a feat before World War II

K-4s, class 4-6-2, built 1914-'28, last few units in service until 1957. Units lasting the longest ran 34 years, some only 20 years.

H-6 class, 2-8-0, built 1890-1913, total of 1835 engines, the most of any U.S. type for any road. All early ones (pre-1902) were gone by 1934, after an average use of 31 years. They were down to 143 units by 1947: the final one ran in 1950. Some units kept up as long as 47 years. Average, about 35 years.

B-6 class, 0-6-0, first built in 1902, but outshopped in quantity after 1913. Last one ran in 1959. Average years in service, 38.

T-1 class, 4-4-4-4, built 1942-'46, all gone by 1955. Average of 8 years in service.

Q-2 class, 4-4-6-4, built from 1944-'45, out of service by 1954. Average of 8 years in service.

P-5 class, electric 4-6-4, built 1931-'35, last used in 1965. Average life, 29 years.

GG-1 class, electric 4-6-6-4, built 1934-'43; many still in service.

E-7 type diesel, built 1947-'49, used until 1971. Average age, 21 years.

SW, first diesel on PRR, built 1937, retired 1968.

Atlantic Coast Line Railroad

P-5B class, 4-6-2, built 1922-'26. Except for wrecked engines scrapped 1950-'52, average age in service was 27 years.

R-1 type, 4-8-4, built 1938, scrapped 1951-'52. Average life span less than 14 years.

O-1 class, 2-10-0, built 1918 first used about 1919, retired 1949-'51. Average life span, 31 years.

E-10 class, 0-6-0, built 1912-'13, out of service 1948-'52. Average years used, 38.

E-6 type, passenger diesel, built 1939-'40, retired 1968-'70. Average age, 29 years.

S-2 type, Alco diesel, built 1942-'44; most of them still in service.

GP-7 type, built 1950-'52; all of them now in service.

Chicago, Burlington & Quincy

R-2 class, 2-6-2, built 1901, retired 1935-'49. Average years used, 44.

S-3 class, 4-6-2, built 1915, retired 1938-'53. Average life span, 36 years.

M-3 class, 2-10-2, built 1919, all retired 1953. In use, 34 years.

O-5 A class, 4-8-4, built 1936-'38, retired 1954-'61. Average years in use, 23.

E-5 type, passenger diesel, built 1940-'41, retired mostly in 1967, after 26 years service.

SW type, diesel switcher, built 1937, retired 1965-'66.

Southern Pacific

P-5 class, 4-6-2, built 1912, all retired by 1952. Average life span, 39 years.

SP-1 class, 4-10-2, built 1925, all retired by 1954. Most of them used 28 years.

ES class steeple-cab electric type, ended up in service on WCF&N. Baldwin-Westinghouse units, built in 1912, retired about 1961. In use 49 years.

AC cab-forward types (classes 4 to 12) 4-8-8-2, built 1928-'44, all retired 1953-'56. Average years used, 18.

NW-2 type, GM diesel switcher, built 1941-'49. Most of them are still in service.

FP-7 type passenger diesel, built 1953, still used.

New Orleans & Public Belt R.R.

Class 12, 0-6-0, built 1912, retired 1947. In use 35 years.

Class 20, 0-6-0, built 1921, retired 1955. In use 34 years.

Class 31 Baldwin 900-hp diesel, built 1937, retired 1966-'69. Individual units in service 29 to 32 years.

Class 41, Baldwin VO-660 type diesel, built 1941-'42, retired 1966-'71. Members of class in service 24 to 30 years.

New Orleans & Lower Coast R.R.

2640 (ex-MP), 4-6-0, built 1893, retired 1948. In service 55 years.

2516 (ex-MP), 4-6-0, built 1898, sold in 1948 to Louisiana Southern.

2393 (ex-MP), 4-6-0, built 1902, retired 1948. Used 46 years.

3002, Plymouth gas-mechanical 0-4-0, built 1930, retired 1957.

9013-15, S-1 type, Alco diesel, built 1947, still in use on Brooklyn Eastern District Terminal.

While many older steamers endured far longer than any diesel power, diesels did very well when compared to steam power of their vintage. Back in the late 1800's, the average life of a steam boiler was said to be under ten years, so much of what came down through the years was not the same locomotive as built. ●

Colorado & Southern Railway

Locomotive Roster Compiled by Sy Reich

Road Numbers	HP	Builder	Builder's Model	Wheel Arngt.	Tractive Effort	Weight	Date	Notes
150-152	1000	GM-EMD	NW2	B-B	31,200	247,800	1947	
153	1000	GM-EMD	NW2	B-B	31,200	247,800	1948	
154	1000	GM-EMD	SW7	B-B	35,600	247,325	1950	8
155	600	GM-EMD	SW1	B-B	24,000	202,064	1940	1
156-160	1200	GM-EMD	SW1200	B-B	35,600	246,270	1959	
700A,B-702A,B, 700D,C-702D,C	3000	GM-EMD	(F7A)x(F7B)	(B-B)x(B-B)	82,000	490,000	1950	2,7
703A,B,703D,C	3000	GM-EMD	(F3A)x(F3B)	(B-B)x(B-B)	82,000	490,000	1947	2,7
810-819	1500	GM-EMD	SD7	C-C	67,000	316,300	1953	
820-830	1750	GM-EMD	SD9	C-C	67,500	325,683	1956-7	
831-842	1750	GM-EMD	SD9	C-C	67,500	325,683	1959	
868-874	3600	GM-EMD	SD45	C-C	74,200	386,253	1971	
875-878	3000	GM-EMD	SD40	C-C	71,000	382,013	1967	
879-887	3000	GM-EMD	SD40	C-C	71,000	383,846	1968	
890-893	3000	GE	U30C	C-C	74,000	387,750	1968	
900-917	3000	GM-EMD	SD40-2	C-C	74,500	382,047	1972	
9950A-9952A, 9953	2000	GM-EMD	E5A	A1A-A1A	54,000	315,720	1940	3,7
9950B-9952B	2000	GM-EMD	E5B	A1A-A1A	54,000	310,690	1940	4,7
9954	2000	GM-EMD	E5A	A1A-A1A	54,000	315,720	1940	5,7
9955	2000	GM-EMD	E5A	A1A-A1A	54,000	315,720	1941	6,7

Colorado & Southern Notes

Roster is based on data from C&S mechanical superintendent and is accurate as of July 12, 1972. Abbreviations used: HP, horsepower; GM-EMD, General Motors-Electro Motive Div.; GE, General Electric Co.; Wheel Arngt., wheel arrangement. Tractive effort is continuous rating in pounds; weight is in pounds. The following C&S units are still on the roster: 150-154, 156-160, 810-842, 868-887, 890-893, 900-917.

(1) 155 was originally Chicago, Burlington & Quincy 9146; then C&S 155; then Fort Worth & Denver 601 (2nd); then Burlington Northern 103.

(2) 700A, B, C and D-703A, B, C, D are rated at 1500 hp per unit. 700D was rebuilt to an F9A. 703A, B, C, D were originally CB&Q 119A, B, C, D; then C&S 703A, B, C, D.

(3) 9951A-9953A were originally CB&Q 9910A-9911A, 9909; then C&S 9951A-9953A.

(4) 9951B-9952B were originally CB&Q 9910B-9911B; then C&S 9951B-9952B.

(5) 9954 was originally CB&Q 9913, then C&S 9954.

(6) 9955 was originally CB&Q 9914A, then C&S 9955.

(7) The following units were sold to GE in trade for new power: 701C,D, 702D. The following were sold to GM-EMD in trade for new power: 700A-D, 701A,B, 702A, B, C, 703A, B, C, D, 9950A,-B-9952A,B, 9953-9955.

(8) This unit has been derated from 1200 hp. ●

Penn Central 7338 idles near old Willow Run Turn. Depot at Ann Arbor, Michigan, was built in 1887.

Bill Botkin, 13 Columbia Rd., Convent Station, N.J. 07961

THE GIRL IN A WHITE FLANNEL NIGHTGOWN

WITH 50 years of railroading behind me, I recall a cold, blustery, winter day in 1918 when I was a kid telegrapher on the extra board at the old Vandalia Line (now part of Penn Central). I had gone to the YMCA in Logansport, Indiana, to shoot pool when a message came from the local Vandalia operator: "Arrange to protect third trick at Hoover (Indiana) on January 29th, which is now assigned permanently to you as senior bidder on vacancy."

Elated, I got a taxi and was soon at the Vandalia depot and on the wire informing the chief dispatcher when I'd report for duty. But upon arrival at Hoover late the following afternoon, my heart sank. It turned out to be a one-horse burg of frame houses sheltering about 50 lonesome people, a blacksmith shop, a church, two small grocery stores, and only four daily passenger trains. How could I possibly endure such a town?

"I'm leaving right now," I groaned to myself; but the next train to Logansport, the main terminal, wouldn't come through until 10 a.m. tomorrow. So I had to stay in Hoover, at least overnight. Had it been mild weather, I would have walked the 12 miles back to Logansport. However, the agent was a kindly soul. Noting my despondency, he tried to cheer me up. He introduced me to the afternoon operator in the interlocking tower, where things were humming, and recommended a good place for room and board.

That was nice enough, but I hated to see how rushed he was, copying one train order after another from the Chesapeake & Ohio dispatcher.

"What do you do when the Vandalia dispatcher also gets a busy spell?" I asked.

"Don't worry about that, son," he reassured me. "The Vandalia has no wires in the tower and their freight business is very light."

That brightened the situation a bit. So the Vandalia's only wires were in the depot—the dispatcher's wire and the message wire. All C&O orders were copied from a DS phone, a poor one at that but very active.

In due time I was handling the job fairly well for a kid. The dispatcher soon learned that despite my youth and slight experience I could telegraph better than the average ham. About ten of us were strung out between two Indiana cities: Peru, famed as a circus center, and Gary, the steel city. Most of us were overflow hams from the World War I emergency. Even a wind or rain storm in those days could put the phone out of commission; but that old stand-by, the telegraph, remained active. DS kept me very busy.

I shall never forget one cold night, with gale winds near 45 miles per hour, when the phone suddenly went dead. The dispatcher wanted to put out an order changing the meeting point of two passenger trains. Northbound No. 6 had been scheduled to meet southbound No. 7 at Twelve Mile, but the latter was running 15 minutes late. The first three stations north of Hoover were Twelve Mile, Fulton, and Kewanna. The brass pounder who worked the third trick at Kewanna was well along in years and could not telegraph very well. Besides, his energy was at a low ebb and he had difficulty in staying awake on the job.

We used the standard train order manifolds or "flimsies." The "19," an advancing or helping order, was handed up to the front and rear of moving trains by means of hoops. If both ends succeeded in snatching it, the train could proceed without a stop. But if either one muffed it, the train had to stop and return for the order. The "31," of course, is a restricting order, delivered under a red order board. The train had to stop so that both the hogger and conductor could sign for it.

So DS issued a "19" to train 6 at Hoover. The "31" was addressed to No. 7 at Kewanna, instructing the two trains to meet at Fulton instead of Twelve Mile. Although both were first-class trains, No. 6 was superior by direction and ordinarily would have held the main track. In this case, however, DS stipulated that it take siding so as to cause the least possible delay to the other train, which was thus given a chance to make up some lost time.

I delivered the "19" to No. 6 nonstop at 2:45 a.m. Both the fireman and the brakeman got their arms through the order hoops. When I re-entered my office the C&O dispatcher was calling me repeatedly: "VR—VR—VR—VR VR." I answered without pausing first to take off my heavy winter wraps. He had hoped to get my answer before No. 6 went by, but now it was too late. While I had been delivering the order to No. 6, the old Kewanna operator, panicky and excited, told the dispatcher that he had overlooked delivering the "31" order to No. 7.

The C&O track between Hoover and Kewanna was not designed to cope with such an emergency. Instead, it stretched over rolling terrain with a dozen or more curves, including two long reverse curves; so that a "cornfield meet" (head-on collision) appeared inevitable. I wasted no time listening to the dispatcher's suggestions. A bright idea had come to my youthful mind. Since our local phone was dead, I rushed down to the depot. It was locked. Grabbing the scoop from the coal shed, I smashed the glass on one side of the bay window, climbed inside, and cut in on the Vandalia dispatcher's wire and blurted out what had happened.

"Call the night telephone operator at Twelve mile," I urged the DS, "and get her to stop No. 6!"

Although the phone girl had gone to bed for the night, she answered at once. At first she seemed reluctant to cooperate. But realizing that lives were at stake, she told the Vandalia dispatcher that already she could hear No. 6 whistling for town and feared she couldn't reach the track in time. Then she rose to the challenge. Wearing only a flannel nightgown in biting cold weather, she dashed out to the C&O tracks just as the engine drew near the depot. Both engine-crew men saw her white-clad figure waving a flashlight.

The hogger slammed on the emergency brake, the "big hole," and none too soon, for the headlight of No. 7 was swinging around a curve on a distant rise. The fireman on No. 6 struck a red fusee and laid a torpedo on the rail. Meanwhile, the hogger backed his train into the passing track, as they had run by for about a quarter-mile, and his fireboy relined the switch for the main. By that time the other train had arrived at Twelve Mile after making up five minutes of lost time. Knowing that they were supposed to take siding and having stopped for the red fusee and torpedo, No. 7's crew went into a pow-wow with the crew of No. 6. They agreed that someone had overlooked a train order—and so, after a routine investigation, the aged operator at Kewanna was fired.

I deserved some credit for what I had done to prevent a cornfield meet, but the Logansport newspapers ignored my part in the affair and played up the telephone girl at Twelve Mile as a heroine in a white flannel nightgown. This annoyed me. I wrote to my mother at Crawfordsville, Indiana, and sent her clippings from the Logansport paper. Mom forwarded my letter and clippings to the two daily papers in my home town and each gave me a fine write-up. I still have copies of those write-ups, now brown and crumbling with the passage of time.—John M. L. McCoy, 126 Park Pl., Napoleon, Ohio. ●

INFORMATION BOOTH

ASK BARBARA: Railroad questions are answered here—as many as space permits. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 East 42nd Street, New York, N. Y. 10017. No questions will be answered by mail or telephone.

1 ***Just exactly what is the function of a crosstie?***

It keeps the two rails firmly in place at the proper width of gage and transmits the wheel loads into the ballast section. Wooden ties are treated with a mixture of coal tar and creosote to extend their life. The average length of an untreated tie is estimated at 6 to 7 years, whereas a treated tie lasts 25 to 40 years. Ties deteriorate through decay, mechanical wear, and in areas where a great deal of respiking is necessary to maintain the proper gage through spike-killing. When any of these conditions develop, the ties have to be replaced.

2 ***Give specifications of Norfolk Southern's 600 class Berkshires.***

These five Baldwin-built 2-8-4's had 23½x30" cylinders, 63" drivers, and 250 lbs. of boiler pressure. They weighed 335,400 lbs. without tender and had 49,300 lbs. tractive force.

3 ***Which road was the N&L?***

You probably mean the old Nashua & Lowell, incorporated in New Hampshire in 1835 and in Massachusetts the following year. In 1880 it was leased to the Boston & Lowell for 99 years, a lease which the Boston & Maine assumed in 1887.

4 ***Do European track gages vary?***

Yes, indeed! In most of continental Europe, standard gage is the same as in the U.S. and Great Britain, 4 feet, 8½ inches. Among the exceptions are the Soviet Union, where trackage is 5-foot gage; Spain and Portugal, 66-inch gage, and Norway and Sweden, 42-inch gage; also metre gage.

5 ***What part of the Missouri Pacific was the old St. Louis, Iron Mountain & Southern?***

The part extending from St. Louis to Belmont, Mo., and from Bismarck, Mo. to Texarkana, Ark., including branches, 695 miles. A spur to the famous health resort of Hot Springs, Ark., was rich in passenger revenue. Chartered in 1874, the latter road you mention was a consolidation of the St. Louis & Iron Mountain with the Cairo, Arkansas & Texas and the Cairo & Fulton, all of which had been organized in 1853.

6 ***Which was Canadian Pacific's largest Pacific type loco in the late 1930's?***

The type represented by No. 2353, which boasted 22x30" cylinders, 75" drivers, 275 lbs. of boiler pressure, a weight of 316,000 lbs., and 45,000 lbs. of tractive force.

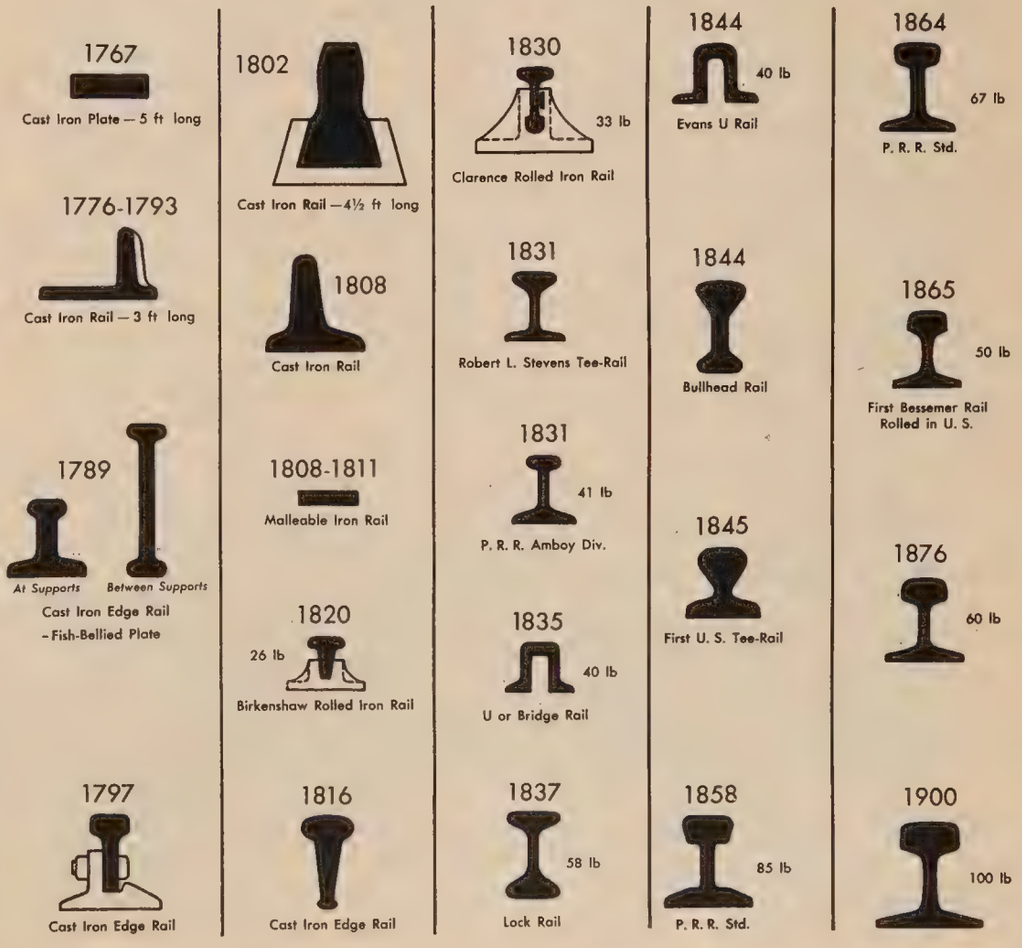
7 ***To model oldtime Denver & Rio Grande narrow-gage equipment, I'd like to know who built the rolling stock and such basic dimensions as are available.***

This magazine does not cover model railroading. You can find several good publications in that field. We will say that Jackson & Sharp built the first Rio Grande coaches. Each weighed 15,000 lbs. and was 35 feet long, 7 feet wide, and 10½ feet high. Capacity was 36 persons, the interior having an aisle with single seats 19" wide on one side and double seats on the other, 36" wide. At the car's center the seating order was reversed to balance transverse car weight. During cold weather, heat came from coal stoves located at each end of the coach. Billmeyer & Smalls of York, Pa., built the first D&RG flatcars, which weighed 6,250 lbs. apiece, were 23½ feet long and 6 feet wide, and carried about 10 tons of freight. The road's slim-gage boxcars had the same capacity.

8 ***Did the Santa Fe ever have a Mother Hubbard, or Camelback, type of engine?***

Yes, but only one, an experimental job built under Strong patents at Schenectady, N.Y., in 1887. She had the

RAIL CROSS-SECTIONS DOWN THROUGH THE YEARS



then-unusual 4-4-2 wheel arrangement, was numbered 738, and was eventually converted to a conventional 4-4-0. Another Camelback, a Twelve-wheeler, was ordered at the same time. Construction was started under Schenectady shop number 2416, but for some reason unknown to us she was never completed.

9 ***What is the annual fuel bill for Burlington Northern diesel locomotive?***

Around $30 million. As Ivan C. Ethington, operations chief of BN, dramatizes it, "How do you feed more than four million hungry horses working on the longest railroad in North America?" The actual figures for BN's 2,160-unit locomotive fleet is rated as a whopping 3,368,910 horsepower. The entire system exceeds 25,000 miles of road in 19 states and two Canadian provinces, including two subsidiary lines, the Colorado & Southern and the Fort Worth & Denver. The horses lap up some 338 million gallons of diesel oil a year, about one-third the requirement of the world-ranging U.S. Navy.

While Burlington Northern is a substantial consumer of oil reserves, its locomotives are a positive factor in both resource conservation and pollution control, asserts Mr. Ethington. This is due to the inherent efficiency of the diesel.

10 ***Have you the words of an old favorite poem, "Over the Hill," by Charles Hunt?***

Sure enough; here they are.

Frost upon the headlight, snowflakes in the air,
Storming in a canyon, winter everywhere;
Engine's working harder with a muffled roar,
Tallowpot on the deck feeling kind of sore,
Wishes he could marry rich, wouldn't work no more.
Hoghead is a-singing, nothing on his mind;
If they lag around the curves, cuss the man behind.
Man behind is sleeping on a cozy bed;
If she lags around the curves, cuss the man ahead.
Conductor in the cupola, nodding unawares;
Boomer in the boxcar, counting hobo fares.

Then the playful compound snaps the train in two,
Just to give the boomer something else to do;
Brakeman in a passion drags a frozen chain
Twenty car-lengths in the snow, swearing might and main,
Ties the train together like a broken string.
My, to be a boomer 'tis a joyful thing!
Slower turn the wheels, then they slip and stand.
Head man out of water, hind man out of sand;
Only halfway to the top, trouble just begun;
That's the way we make the hump with 1900 ton.

11 ***A brief history, please, of the Quebec, Montreal & Southern.***

Incorporated in Canada on July 13, 1906, it succeeded the Quebec Southern and the South Shore railways and originally was controlled by the Delaware & Hudson. At the time of inception it had 145 miles of track, all in Quebec, extending between Noyan and St. Robert and between St. Lambert and Placerville. In 1929, when the Canadian Pacific bought this road from the D&H for $6,200,000, it was operating 199 miles and owned 14 locos and 1,449 freight and passenger cars.

12 ***Why are 2-8-2's called Mikados?***

Because they were first built for operation in Japan, whose ruler was the *Mikado* (Emperor). For many years the "Mikes," as they are often called, were also popular in the U.S., Canada, and other lands.

13 ***What was the general character of bearings in steam locos?***

The brasses were generally used with semicircular bearing surfaces held in cast-iron or cast-steel journals which had an oil box or cellar below the axle, supporting the axle. These journals usually had a vertical slide in the pedestal, or horn piece, to give the loco flexibility in rapid running, in an up-and-down spring motion, without danger of the wheels being lifted off the track.

14 ***Suppose No. 97 is a third-class train west bound and gets an order at B to the effect that No. 16, is a first-class eastbound, will wait at F until 11:52 a.m. for No. 97. How would 97 be governed if it should arrive at F at 11:30 a.m.? Would it be allowed to proceed?***

Under no circumstances would it leave F until the order had been fulfilled or superceded by another order. No. 16's failure to reach F before the time prescribed in the order would make no difference. No. 97 must take siding and wait for No. 16 or until it is given a new order.

15 ***Tell me something about the Consolidation type engine.***

Baldwin built the first one in July, 1866, for the Lehigh Valley. The name Consolidation came from the fact that the LV had just taken over a couple of smaller roads. The great Alexander Mitchell, master mechanic of the LV's Mahanoy Division, furnished plans and specifications for the then-new type. The engine was built to haul a fairly heavy train over the Mahanoy Grade in Pennsylvania, which rose at the rate of 133 feet per mile. The first Consolidation had cylinders 20x24", four pairs of connected drivers 48 inches in diameter, and a Bissell pony truck in advance of the cylinders and equalized with the front drivers. The loco weighed 90,000 lbs. in working order, 80,000 lbs. of which were on the drivers.

Running Extra

Eldon Neff asked about Karshner's Kingdom & Adelphi Railroad. I think both Karshner and Kingston & Adelphi were names applied to the railroad without benefit of legal finalization, or perhaps the intent was there but the deal fizzled. Regarding the interest in the Cerrillos Coal Railroad's No. 870 at Madrid, readers can see before (SLRM&P 101) and after photos of her in the book *New Mexico's Railroads* by David Myrick (available at $7.95 from the Colorado Railroad Museum, P.O. Box 641, Golden, Colo. 80401), along with 200 pages of text and other photos.—Cornelius W. Hauck, 8400 Summerhouse Rd., Cincinnati, Ohio 45243.

Are any New York Central steam locos preserved aside from the 999? I can't trace any of them today, although Hudson 5433, class J3a, was seen in the Croton enginehouse in 1960.—Stephen Baldwin, 4 Washington Sq. Village, New York, N.Y. 10012.

I need info. for my school regional planning on the New York, Ontario & Western and on streetcars that ran in the New York State Capital District and in the area of New Brunswick, N.J. Who will recommend reading material dealing only with interurbans and streetcars?—Clifford Woolfe, 237 S. Third Ave., Highland Park, N.J. 08904.

Can anyone tell me about the old Fishkill Electric Ry.?—David Fischer, 132 Corte Del Prado, Walnut Creek, Calif. 94598.

When did Michigan Central introduce the steam streamliner *Mercury*?—Frank Stock, 2614 Whalen St., Ham-

Do any U.S. non-tourist lines still use steam?—Doug Hawes, 6708 Wilton Dr., Oakland, Calif. 94611.

What happened to the movie "Fools Parade"? Made in late 1970 at Moundsville, W.Va., it featured the Tennessee

Valley Railroad Museum engine 4501, repainted as a B&O type. Bill Gwynn of 650 Main St., Bridgeport, Ohio 43912, covered this filming and got some good pix.—Harry Olmsted, 1025 Oakcrest Rd., Arlington, Va. 22202.

I own a railroad oil can and lock with initials B-R&R Ry. and T&PRR. Anyone know details?—R. S. Cooper, 11810 Arden Ave., Cleveland, Ohio 44111.

Enjoyed seeing the "fireless cooker" pictured in your Sept. '72 issue. Will someone tell me how they operate?—James Weaver, 705 Brenton Rd., Shippensburg, Pa. 17257. (*Ed. note*: Details in May 1969 issue of *Railroad Magazine*.)

I seek details on the Ohio & Little Kanawha, which still runs between Columbus, or Zanesville, Ohio, and Parkersburg, W. Va., and is owned by B&O. The short line had a doodlebug in the 1930's.—Victor Rich, 1246 Arapahoe Rd., SE, Massillon, Ohio 44646.

Dennis Cowley asked for info. on Florida East Coast 4-8-2's and 0-8-0's. Alco built their Mountains, 401-420, at Schenectady in August, 1924. Their switchers, 251-255, also were Alco-built, but in Richmond at the same time. If he wants further details, I'll be glad to fill him in.—Seth Bramson, 8035 Cecil St., Miami Beach, Fla. 33141.

Info. and history on Pere Marquette's operation in Michigan are wanted by Chas. Lukowitz, 55 Lane Ave., NW, Grand Rapids, Mich. 49504.

Any history available on the Charleston & Western Carolina? Also: are there any external carbody differences between the various B-B-trucked GE U-boats?—Leroy Floray, Jr., 1326 Denbright Rd., Baltimore, Md. 21228.

Which Pennsy K4 was involved in the tragic wreck at Woodbridge, N.J., in 1958? Chas. Menagh, Farmingdale, N.Y.

Regarding the origin of the name Nickel Plate Road for the New York, Chicago & St. Louis: nickel-plating in early days was a hallmark of high quality. The road was given that nickname to indicate the kind of service it provided. (Ed. note: Well, that's another version. We're not sure which one is right.)

What types of steam passenger locos did the Wabash use in the mid-1940's? I remember riding behind one from Detroit to Chicago.—Ted Szybowicz, 10166 Pelham Rd., Taylor, Mich.

Who knows details on the abandoned roadbed near Hackettstown, N.J., about a half-mile west of the present Erie Lackawanna right-of-way?—John Gray, 77 High St., Newton, N.J. 07860.

I have a switch key with "CBU RR" stamped on one side and "W. Bohannon, Brooklyn, N.Y." on the other. Please explain.—Sid Shelburne, Box 645, Hastings, Neb. 68901.

I want info. on the creamery fire at Little York, N.Y., in the late 1920's on the Lackawanna.—Mike Doyle, 110 Marion Ave., Syracuse, N.Y. 13219.

Anyone have a brief history and final disposition of Lima's Berkshire No. 1?—John Lukko, 225A W. Dunne Ave., Morgan Hill, Calif. 95037.

Answering J. Andrews: the Santa Fe still uses Morse telegraph on some branches in Kansas and on a standby basis in Oklahoma and Texas on the Plains Division, now grown to include 22 districts after consolidations of two other divisions. Young men entering the service as operators are disinclined to learn Morse, so what with station consolidations and mobile agencies being created, where one man can handle 4 or 5 depots with a specially equipped motor van, Morse is no longer needed.—W. O. Gibson, 1320 Van Buren, Apt. 2, Amarillo, Texas 79101.

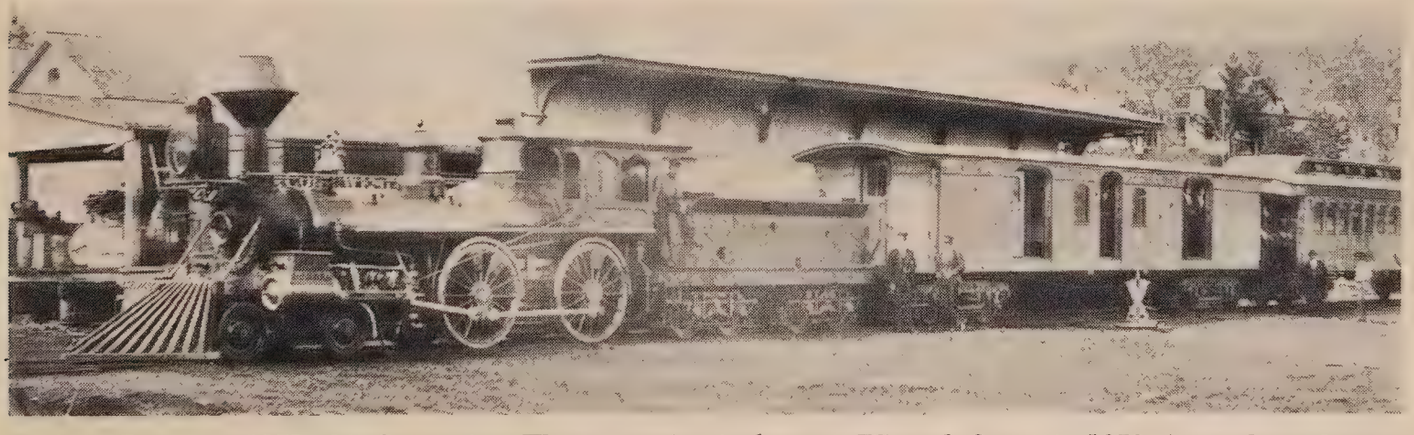
Info. wanted on the renumbering of Pennsy E-7 diesels 5900 and 5901 (the original numbers). If now in service, what are their present numbers?—Larry Keller, 2741 Thornbridge Rd. W., York, Pa. 17404.

Why are the lenses of Penn Central yellow position signals cone- or bullet-shaped rather than convex?—G. Lynn Donelan, M.D., 495 Biltmore Way, Coral Cables, Fla. 33134.

Regarding the piece about *The Egyptian* in your July '72 issue, this overnight train carried sleepers from both Evansville and Cairo to Chicago over the Big Four in either 1933 or '34. It also had a sleeper from Evansville to Indianapolis, being set out at Paris, Ill., for pickup. I believe that in 1951 it lost its last sleeper, which had been running from Chicago to Harrisburg every other day. At the same time it also lost its name.—John Allen, Box 259, Centralia, Ill. 62801.

Who knows about the old Pennsy unfinished project called the "Westville cutoff"? The line was at least partially graded but apparently never placed in service.—G. Gerrish Williams, 26 Overbrook Ave., Maple Shade, N.J.

Regarding John Stewart's comments about solid pilots used on Pennsy locos, I believe you will find that the first ones, applied to GG1 electrics, beginning with No. 4858 (Oct. 1937), had heavy sheet-steel pilots about 5/8-inch thick, with drop couplers, all designed by a Pennsy mechanical engineer. However, the steam-type of solid pilot with drop coupler is practically all built of cast-steel. Most of the parts Mr. Stewart mentioned are contained in the drop-coupler mechanism.—Bert Pennypacker, 4307 Palmetto St., Philadelphia, Pa. 19124.



Built by Rogers in 1871, this Connecticut Western engine is shown at Winsted, Conn., in 1872. A year later she was sold to the Shepaug Railroad for $3,000. Her cylinders were 15x22 inches and her drivers 60 inches.

THE MISSING "31" ORDER, by Ike Karmer

HANDING me a copy of *Railroad Magazine* some months ago, a retired lightning slinger pointed to one of the Virgil Staff photos that some readers had been beefing about. The picture was beautiful. It showed a petite blonde, Judy Greene, standing at the entrance to the Santa Fe station at Lunas, New Mexico, and looking back over her shoulder like she was waiting for somebody.

"Ike," he said, "this girl reminds me of a chick I used to date when I was a young brass pounder on the Illinois Central. They didn't wear minis in those days; but was she pretty, like the one you see here! And she made history by helping to prevent a cornfield meet, which kept my record clean."

I was perfectly well aware that a "cornfield meet" was a head-on collision; but I couldn't imagine how a girl got into the picture, unless she was a telegraph operator. It turned out that she wasn't. She worked for the telephone company. Here is the story, as my anonymous companion told it:

Back in 1913 or '14, while bucking the telegrapher's extra list, I worked at Roberts, Illinois, and played around with a blonde whom I'll call Esther, which wasn't her name. Many happy hours we spent together. Then the regular agent at Roberts came back to work. So Carl Davis, the chief dispatcher at Kankakee, Illinois, moved me on to Gilman, about 25 miles south of Kankakee, thus separating me from the girl friend by 16 miles of Illinois prairie land.

I was glad the distance wasn't further. Besides keeping in touch with Esther by phone, I rented a gig now and then from the livery stable and drove down to Roberts to see her. If you have never petted a girl in a buggy on a fine starlit night, brother, you don't know what romance is.

I had just returned from one of these visits when trouble began. I showed up on the job a few minutes late. As I came in, I heard the second-trick man fussing about young squirts riding around the country in a horse and buggy, chasing skirts. He gave me a frozen look when he handed me the transfer sheet to sign. As you know, the transfer sheet is a turnover that one operator leaves for another, showing all the train orders to be delivered to future trains.

Glancing at the sheet, I noted four "19" orders for train 63, the Chicago-St. Louis hotshot. As I entered the room I had heard a message about this train being delayed by setting out a car with a hotbox.

"You can clear 63," snapped the second-trick operator. "I don't do any work for you while you're having fun with a dame."

Then he stamped out of the office. Later, 63's conductor came in to demand an order permitting him to enter the St. Louis Division at Gilman. Laying down the evening paper I had been reading, I called the dispatcher at Kankakee—his name was John Maddox—and asked him to clear No. 63 with the four "19" orders on the desk. One order called for a check on superior trains due off the St. Louis Division. Another had to do with conditions down the line and still another set a meeting point at Gibson City, Illinois with No. 62, the northbound merchandise and stock train.

Grabbing his flimsies, the conductor rushed out of the office and delivered the hogger's copy. The crew was in a hurry because the hotbox had delayed them more than 20 minutes and they would have to lay out No. 62 at Gibson City on that meet order. Having a lull in my work schedule, I read the newspaper again, but stopped briefly to OS train 62 as she thundered out of town, highballing for Gibson City. Then all hell broke loose.

The trick dispatcher at Kankakee called me on the wire. Just about the same time I heard the ring of the dispatcher's phone that connected our office with the chief's. I decided to answer the trick dispatcher first and let the chief's phone ring a while. John Maddox asked me what I had done with the "31" order I had for No. 63. That question threw me for a loop. I didn't remember any such order for No. 63. Checking my train-order file quickly, I found the "19" order that gave 63 a meeting point with 62 at Gibson City, but no "31" order.

If you've been railroading long enough you know how often it happens that when one man slips, others do, too; and this was one of those days. I lifted the newspaper I had been reading and had thrown down on the desk when Maddox called me, and there was the "31"! I read it out loud. Cold sweat bathed my forehead. No. 62 was meeting 63 at Roberts instead of Gibson City! Because No. 63 had been delayed by the hotbox, DS changed the meeting point from Gibson City to Roberts, some 13 miles north.

You don't have to be a mental giant to predict that the Illinois Central had a major head-on crash in prospect. Brother, call the wrecker! I wished I was somewhere else. But here I was; and through my own carelessness two trains were roaring down a dark railroad on a single track toward each other, with nobody to stop them!

Then I actually smiled. I was conjuring up an image of my girl friend, Esther, in the town of Roberts.

"Just sit tight," I said to Maddox at Kankakee. "I think we can stop 63 at Roberts."

Maddox must have been in a cold sweat. Our jobs were in jeopardy, not to mention the lives of every man in the engine cabs on trains 62 and 63. I had figured that the trains would come together about three miles south of Roberts—unless we could get them stopped! I knew that Esther worked for the phone company in a building that stood just behind the Roberts depot. She had a cot beside the switchboard that she used at night to answer incoming calls. So I phoned her. After a long wait, I heard her soft musical voice at the other end of the wire.

"Esther, dear," I blurted out, "I'm in trouble. Do you have anyone who could flag a train there?"

"Yes, indeed," she replied quickly, "the night lawman here is just outside making his rounds with a lantern. Why —what happened?"

"Please tell him to flag all trains and let me know when he does. I'll explain later."

Then I called chief dispatcher Davis at Kankakee and told him what I had done.

"If that night lawman can stop 63 in time, we won't have a cornfield meet," I added, "but if he can't, send my check to Arkansas—because, mister, I'll be leaving town."

Dear little Esther had left her line open and I could hear her breathing on the other end of the line. Suddenly 63's engine blew for town, and soon I heard the hogger on 63 answer a flag and the engine fight herself down. I heaved a great sigh of relief. Then the

angry conductor on 63 barged in on the IC's pony phone line that ran between stations.

"Say," he demanded, "what in hell is going on here?"

But before I could answer him, he burst out: "Sixty-two has run a meeting point at Gibson City. I can see her headlight coming south of town."

"No, he didn't run a meeting point," I replied joyfully. "I just made a bull. I failed to deliver a '31' to you, changing the meeting point from Gibson City to Roberts. You can thank an alert telephone girl and a night lawman for saving the lives of your engine crew. Without her, man, there would have been one helluva pile-up."

Later, I expected to be fired for that slip. But they only gave me ten days that I never served. As you can readily understand, the brass collars in Kankakee wanted to cover up, so they never said a damned thing about it.

If this had been a movie show, I would have married Esther and lived happily ever afterward. But I didn't marry her. Never mind why. That's another story. However, I sent her and the lawman each ten bucks to show my appreciation. I had learned one lesson. Sometimes women and railroading *do* mix. They sure did that exciting night at Roberts.

And that's the story my companion told me. I wonder why he didn't marry Esther and what finally happened to her. ●

FORGOTTEN LIMA LOCOS, by Bill Jernstrom

CONTARY to what many rail historians say, Lima's first entry into the field of internal-combustion motive power was not the 1000-hp diesel switcher known as C/N 9307 which the Lima-Hamilton Corporation outshopped in Lima, Ohio, on May 12, 1949. Actually, the Lima Locomotive Works (predecessor of L-H) designed and built three internal-combustion, gasoline-powered switchers some twenty years earlier. These three have been forgotten by railroad men and railfans alike.

Early in 1928, the Lima Locomotive Works organized the Ohio Power Shovel Company to design and make various sizes and types of cranes, primarily for the construction industry. In that year the shovel company utilized the internal-combustion know-how it had acquired from manufacturing cranes to create four-wheel switching locomotives mechanically driven with a gasoline engine. This company produced two models: a 100-hp type known as L-100-G and the larger, more powerful L-150-G with 150 horsepower. Almost immediately the latter was changed to a 200-hp model, the L-200-G.

First to be built was a 100-hp type, L-100-G, designated C/N 2000, which was completed in the fall of 1929 just as the Depression set in. Despite Lima's aggressive sales program, the downfall of the nation's economy reacted against the promising new switcher. No buyer could be found, so the rejected goat spent its life span paddling around disconsolately in the spacious yard of the Lima plant.

At about that time a 150-hp switcher, C/N 2001, was planned and built there and was changed promptly to C/N 2002 to cover the design and construction of a 200-hp locomotive. Completed in the spring of 1930, this baby was sold to the nearby Ohio Steel Foundry Company in the city of Lima, where it spent many fruitful years switching the steel yards. What happened to it eventually is not a matter of record. Presumably the pioneer switcher was scrapped.

In 1931 a still larger model was created, the L-250-G with 250 horsepower, and was classified C/N 2003; but later that year it was vacated in favor of C/N 2004. Lima's chief engineer, Michael J. Donovan, said they were considering the production of a 250-hp diesel version. It was not produced, however, and both C/N's were quietly cancelled in late 1931. Shortly before that time the designation C/N 2005 was assigned to a shop order for actual construction of a 250-hp switcher, which was duly outshopped in August, 1931. But Depression still gripped the land. No buyer could be found for that one, either. So the unwanted unit joined its older and smaller counterpart shunting cars and an occasional new steam locomotive around the extensive yards of Lima Locomotive Works. Its ultimate fate also is veiled in obscurity.

Both 100-G and 200-G types were full gear drive, with all connections between motor and wheels accomplished by means of gears and clutches, with no chains or side rods. Shafts and axles were equipped with Timken roller bearings, completely closed and sealed, with lubrication provided at all points. Its short wheel base made the unit especially adaptable to the sharp curves of industrial switching. The fully-enclosed gears, shafts, and axles were offered as a selling point for use in mines, quarries, or construction jobs where dust, sand, and other foreign particles in the air could be a problem.

Both types were built for the same track gage, 56½ inches. Each of those early Lima internal-combustion goats had twin disc clutch and Modine-Sectional radiator and burned gasoline. The L-100-G weighed 30,000 pounds in working order. Its standard height was 10¼ feet. It had a six-foot wheel base and driving wheels 33 inches in diameter. The length over couplers was 17 feet, 9 inches and the fuel capacity 50 gallons. Its four cylinders measured 6⅜ by 7 inches. It had a Hercules motor and its factor of adhesion was 3.59.

Type A of the L-200-G weighed 60,000 in working order. Its standard height was 10½ feet. It had a seven-foot wheel base and driving wheels 38 inches in diameter. The overall length was 22 feet, 1 inch, with a LeRoi motor, a fuel capacity of 100 gallons, and eight cylinders of 6¾ by 7 inches. Its factor of adhesion was 3.15.

With Lima's failure to sell any of these models—except for the C/N 2001 which went to a neighboring steel foundry—the great locomotive plant ended its pioneering venture into the field of internal-combustion motive power. It is regrettable that no details are available on the men responsible for this bold innovation nor the problems they solved in blazing a trail into the future. Your author came upon this forgotten bit of history from a rare item in his large collection of railroadiana—possibly the only copy now extant of Lima's brochure on these three little switchers that were built hopefully more than 40 years ago. ●

THE ANGEL OF CANYON PASS

Illustration by Joseph Easley

by Charles W. Tyler

THE MOUNTAINS of Sangre del Salvador rise from the desert floor of Llanos Pintado like a wavy purple barrier on a flaming carpet. Far to the east of Del Rosa, serrated rims trace their hazy outlines against the horizon. Of these, one deep slash stands out between towering peaks like the notched V of a gun sight. Clearly defined, the eye finds it, a full seventy miles distant. They call it Canyon Pass.

A mighty gorge, with bold ramparts hewn when the world was in the making, Canyon Pass has been shackled by steel but never fully conquered. Ceaseless warfare is forever waged there. Many pages in the history of the Pacific Coast & Transcontinental's Canyon Division are today written in red, grim entries in the ledger of life.

Stories of Canyon Pass have been told and retold wherever railroad men gather. In sandhouse and switch shanty and dispatcher's office; in engine cab and caboose, even in those stiff sanctuaries where heavy-jowled brass hats sit on their mahogany thrones. Of these tales one has become legend. It concerns Bill Carnegan and "the Angel of Canyon Pass."

Just over the hump, in the Sangre del Salvadors, are six miles of track that railroad men consider the most dangerous on the division. Long ago the PC&T built a shanty at milepost 104, on a little flat an eighth of a mile east of the trestle over Big Stormy Canyon, and stationed a trackwalker there. A tiny hut, far from the nearest habitation and surrounded by jagged peaks, it was almost a place of exile. Men called that job "the sheepherder's trick."

Now and then the section boss and his Mexican crew from Paraje had work to do in the vicinity. At intervals a freight stopped to leave supplies. Occasionally wandering Pima Indians broke the monotony. Sometimes folks waved from observation platforms of speeding trains, or there was a shout and a hand raised in salute from cab or caboose. Perhaps a late paper came fluttering off, or a magazine. Always there were Frowsy Head and Thunder Mountain scowling down from their lofty heights, as though debating what particular kind of hell they would hurl next at Canyon Pass.

Bill Carnegan was big, clean-cut and fine-looking. Superintendent McCuen eyed the man speculatively. Something stamped him as a railroader. McCuen judged him to be about thirty-two.

"Well? What is it?" There was scant encouragement in the flat, hard tone.

Bill said with a hint of desperation in his voice: "I'm looking for a job"—he hesitated—"any kind."

"Jobs are scarce," McCuen announced. "What can you do??"

"I—I was an engineer."

The super shook his head. "We got a list as long as your arm of men set back firing."

"I know," said Bill despondently. "I've tried every round-house between here and Trinidad. But I've *got* to get something. Can't you fit me in anywhere? Wages don't matter, Just as long as there is enough for my wife and me to get by on."

"So you're married, eh?"

Bill nodded. "We had to come West for her health. I had rights on the Central Valley, back in New England. She had a bad attack of flu and her lungs are affected."

"Kind of tough, wasn't it—quitting back there when you had seniority?"

The hogger smiled, his eyes lighting. "Not for me. Anything I could do for her wouldn't be half enough. Ann's a great woman. It was mighty hard for her to leave friends and relatives and the house we fixed up."

"Humph!" McCuen stared out of the window and far away toward that purple line of the Sangre del Salvador and the V-shaped cleft of Canyon Pass. At length he asked, "What's your name?"

"Carnegan. Bill Carnegan."

"Well, Carnegan, there's just one job I know of." The super drummed on his desk. "I doubt if it would interest you. A Mex had it last, and he went cuckoo."

"What is it?"

"Trackwalker," McCuen said gruffiy, "out on the hump." After a pause he added: "Men don't stay in Canyon Pass long. The solitude gets inside their skulls and they do queer tricks."

"But I wouldn't be alone."

"You mean you'd take your wife?"

"Sure. I couldn't leave her here. Where I go, Ann goes. Mountain air is just what she needs to help her get well. And it won't be forever. Things will be picking up after awhile. Then I'll get something better."

"How long you been married, Carnegan?"

"Eight years."

McCuen stroked his chin thoughtfully. Here was a big husky fellow from engine service stepping down from the cab to walk the ties—and offering no complaint. He wrote a brief note and handed it to Bill.

"Take this to the roadmaster—Mr. Godett. The last office at the end of the corridor. I guess he'll fix you up."

BILL CARNEGAN went to Canyon Pass. Bill and Ann. It was spring. The mountains were cool. Traces of snow lingered in the deeper clefts of the high peaks. They made a wild, un-

friendly world, those Sangre del Salvadores. It took Ann Carnegan a long time to get used to their untamed majesty.

The ever-changing vistas—dawns that poured gold over the high rims, flaming sunsets, the quickly descending curtain of night, the blasting winds that poured eternally through the pass—all filled the woman from Rhode Island with awe and consternation. The vastness of this bold, raw country was a far cry from the friendly life that had been hers back there on Elm Street.

Though she fought it inwardly, Ann was homesick. But she never let Bill know. Life and health were here. After all, she could do no less than match the gallantry, deed for deed, of the man who had given up much for her. And so Bill saw only a brave, smiling face.

Not once did the man hint of his own tragedy. But Ann sensed the hunger that haunted his eyes when the trains went roaring by. She knew Bill missed sitting at the throttle with drivers pounding under him. By comparison it was a dull existence, this walking the ties with a wrench and a spike maul.

And yet the oldtimers of the Canyon Division could not recall ever having had a trackwalker as dependable as Bill Carnegan. It seemed, that having been at the throttle himself, he realized the importance of his task. The Sangre del Salvadors were filled with constant menace. Slides, falling rocks, washouts—all went to make the place a railroad man's nightmare.

Summer came, the season of torrential rains. And when Frowsy Head and Thunder Mountain wore trailing veils of black, they gave ominous hint of cloudbursts. The Big Stormy, dry at other times, would become a swollen torrent, rolling down boulders and debris. Bill was anxious about the trestle over the canyon. And some nights when thunderstorms sounded their booming war drums, he would dress, take his lantern, and go out to make sure all was well at the gorge.

And always when he returned, chilled and wet, Ann would be up and have a fire going and a pot of coffee on. That light gleaming in the window stirred emotions in his heart. He would slip an arm around Ann's waist, saying, "You're a great person," and kiss her.

"I have to be," she'd answer, "to keep up with you, Bill,"

Crews reported to Del Rosa that Carnegan's lantern was always there to greet them in bad weather. Its twinkling assurance lifted the burden of responsibility for those whose business it was to see that the trains went through safely. The brass collars, McCuen and Godett, spoke of it more than once.

Too, the men on the trains came to watch for the slender form of the woman in the door of the little shanty at milepost 104. She was as much a part of Canyon Pass as Carnegan himself. And if the section foreman's wife was sick, Ann visited the section house at Paraje to be of such service as she could. When a freight went off the iron in the Narrows, she attended to the injuries of the fireman and a brakeman, and made coffee for the crew while they waited for the wrecker.

NOW AND THEN a hungry 'bo was fed at the Carnegan home or the coat of a Mexican gandy dancer was patched. Or they were expecting a new arrival at Pedro's house, and Ann would make a baby dress. So they began to call her the Angel of Canyon Pass. The young lady from Rhode Island found plenty to occupy her time, and busy hands helped her forget. From a shanty beside the tracks she lent her magic touch to the making of a home. Curtains framed the windows. A flower garden took shape. Stones were set in a neat border and whitewashed. The garden was bright and vivid, for Ann loved gay colors—especially red.

The section boss and his men always had a little spare time for landscaping when they were in the vicinity, and it was a good excuse to visit the friendly Mrs. Carnegan. Vines climbed the drab sides of the little yellow building. A red rose unfolded its petals on a bit of trellis. Geraniums added color. There were hollyhocks and wild verbenas. Passengers on the trains looked from Pullman windows and marvelled that a workman's hut could be so pretty.

The general superintendent said it only showed what could be done, and advocated that stations along the line follow the example set for them by the trackwalker and his wife in Canyon Pass. McCuen, coming in from a tour of inspection, spoke to roadmaster Godett, suggesting that a small addition to the one-room structure at milepost 104 would add materially to the comfort and convenience of the Carnegans.

"That bridge gang at Wagon Tire are tearing down a couple of shanties," said the roadmaster. "There's the material, and we've got a work train going to Rag River the first of the week. It wouldn't be much of a job, and Mrs. Carnegan ought to have a kitchen."

"You're damn right!" McCuen agreed. "Why, that shack out there attracks more attention now than the scenery. They tell me that half the women on the trains complain because they can't stop and look at that garden, and maybe get some slips."

One day an old Pima Indian named Maggie Manyfeathers came to milepost 104. She had been gathering piñon nuts in the vicinity, and decided to visit the white man's home as a possible new trade outlet. It was Ann's first woman visitor, and she could have offered no warmer welcome to a neighbor dropping in for a call back on Elm Street.

Maggie said, "How!"

And Ann, proud of a little Spanish taught her by the Mexican section hands, replied "*Como está!*"

The squaw knew Mex, and her stolid face brightened. "Me Maggie," she said. "Indian name Na-va-wi. Manyfeathers."

"Me Ann. I call you Na-va-wi. I am so glad you came here."

And the lady from Rhode Island served lunch, just as she would have done for a visitor at home.

Old Maggie dug down into a pocket of her voluminous skirt and produced a number of desert stones—tourmalines, agates and bits of brightly colored petrified wood. Ann's eyes sparkled. She loved these jewels of the wasteland, and bought two or three stones, and asked Maggie to come again. Later she sent to Del Rosa and Amargosa for gay pieces of calico and other articles that she felt might find favor with the Pima squaw. It was fun sitting out there on the stoop and bartering with Maggie.

Ann Carnegan's health improved. There was a healing tonic in the rarefied air of these desolate mountains. Slowly she was rebuilding—winning her fight to live. A great weight lifted from Bill's heart. He went whistling about his work. Life was good after all. A trackwalker's job was better than the best run in the world—so long as he just had Ann.

Too, the roadmaster had hinted of a better position in store for him. Ann had heard about the old Pima Indian pueblo at Nunez, where Maggie Manyfeathers lived. In time, circumstances made it possible for her to visit it.

When she returned to Canyon Pass she was enthusiastic about the bit of ancient world she had seen. It had been like turning back the pages of an old book, she told Bill.

For a long interval Maggie did not come to Canyon Pass, and Ann missed her. Then one of the Mexican section hands told her that the trader at Paraje had said the squaw was sick. So Ann went to Nunez, taking along such homely remedies as were at hand, together with presents for Maggie's grandchildren.

She rode in a caboose to Paraje, and from there was driven to Nunez in a shaky flivver owned by one of the section men. She stayed away from home several days.

When Mrs. Carnegan took her departure, old Maggie, now on the road to recovery, said: "You *buena!* Good! Na-va-wi never forget."

And old Maggie never did.

IN JUNE of the second summer that Bill Carnegan and Ann had been in Canyon Pass, tragedy laid its dread finger on milepost 104. Ann caught cold. She told Bill it didn't amount to anything, just a case of sniffles. But it settled on her chest. That night there were chills and fever. Bill flagged a westbound freight and sent for a doctor. The doctor came from Del Rosa the next morning on No. 2. A nurse was with him.

They fought valiantly to save her, but it just wasn't in the cards for Ann to live. The patient died two days later, her hand in Bill's.

The former hoghead was never the same again. After that first stunning, tearing blow had eased a little, he faced things with a strange, vacant fixedness that made men shake their heads. They spoke awkwardly of sorrow, of sympathy, while Bill stared at them with eyes that looked beyond, toward that far horizon.

They asked Carnegan where he wanted Ann buried—in the cemetery at Del Rosa, or back East?

Superintendent McCuen was there, and roadmaster Godett, and the section boss and others. They awaited his answer, grave, troubled. They saw here a man under strain, moving as one who walked in his sleep. Where did he want her buried?

The lines that creased his face softened at last. "Why, bury her here," he said slowly, as though there could be no other course. "I want her close, because I'll be keeping watch in the pass."

McCuen, grizzled railroad veteran, found a lump in his throat. Godett fumbled for his handkerchief and blew his nose. The section boss swore under his breath. The husband wanted her buried here! Hardened men of the high desert looked from one to the other.

"Out there on that knoll across the canyon," Bill was saying, "Where she can see her garden, and look down to the foothills."

So they laid poor Ann Carnegan to rest at milepost 104, just west of the Big Stormy. The section men erected a wooden cross, and bordered the mount with white stones from Ann's garden. And Bill set out a red rose, her favorite color.

The first thing that enginemen on eastbound trains saw as they rounded the long curve at the summit of the Sangre del Salvadors was that white cross on Mrs. Carnegan's grave. The Angel of Canyon Pass no longer waved from the little house down the track, but the train crews somehow felt that she was still there—watching for them. More than one veteran of the throttle lifted his hand in solemn salute as his engine pounded past.

Bill continued to walk his beat to milepost 110—out and back each day. He cared for the garden, and smoked his pipe on the stoop in the evening, with the stars looking down.

When thunderstorms crashed off Frowsy Head at night, Bill followed his usual procedure. He dressed, took his lantern, and walked to the trestle over the Big Stormy, to be sure that all was well. Before going out he would light the lamp. He liked to see its yellow glow when he returned.

Old Maggie Manyfeathers came to Canyon Pass again one day. She brought a beautiful piece of polished chalcedony. The wrinkled squaw had, in truth, stolen it from the curio store at Paraje. She could have sold it to tourists. But Maggie had not taken the agate for profit. She put it on the Angel's grave.

THEN there was the bottle, dyed a rich purple by long exposure to the sun, that Bill discovered at the foot of the cross. Ann had been very fond of glass thus colored. Also, in the course of time, a cluster of sparkling rock crystals found their way to that mound of earth.

And there was a round piece of grained ruby glass, snuggling in the dirt—a safety reflector, lost from some car or truck down on the highway. Old Maggie had remembered that Ann was fond of red.

One day Bill saw the Pima squaw gathering piñon nuts down beyond the Narrows, and he called to her.

"You still bring Ann pretty stones," he said. *"Gracias! Mucha gracias!"*

"Na-va-wi love white sister," the squaw replied. "She good woman. She good to old Maggie. She wake up from long sleep some time. See presents Indian bring."

Bill nodded thoughtfully.

"Yes, God bless you, Maggie, she will know. She's watching all the time."

A few days afterward, Bill came home late. Clouds were gathering around Thunder Mountain and Frowsy Head. Black veils threw their long streamers over the higher peaks of the Sangre del Salvador. All afternoon squalls had been snarling far off on the desert rim, with lightning playing on the horizon at half a dozen points. Distant thunder had kept up an almost constant grumble.

The former hogger prepared and ate his supper, and sat for a time on the stoop. In the fading light he walked up the track and across the trestle and on to that bit of raised ground where the grave was.

Then he lingered for a little, tenderly rearranging the stones of the border, smoothing the earth. Each of the presents that old Maggie had brought he picked up, wiped off carefully, and returned to their places.

A freight came roaring over the summit from the west. The whistle moaned under the easy drag of the engineer at the cord. The fireman and brakeman both crossed the cab to look from the gangway. Bill waved at them. Faces in the cab of the pusher and in the caboose saw the trackwalker, and men shook their heads. A strange picture here in the dusk—a lonely figure, a grave, a cross.

A storm centered around Frowsy Head. The lightning was sharp and frequent. Thunder boomed through the mountains with jarring reverberations. A large proportion of the runoff from the eastern watershed of Frowsy Head spilled into the Big Stormy.

A new storm moved up from the south toward Thunder Mountain. Bill stood in the door of the shanty watching. It looked bad. Thunder Mountain and Jawbone dumped water from their rocky slopes into the Narrows. There

was always danger of slides and falling boulders.

Bill donned oilskins and boots. "Guess I'd better go down to the Narrows," he told himself.

He lighted the lamp on the table near the window, took his lantern, and went out. On the threshold he paused to look back. His eye went to every familiar object that she had touched.

He went out to the trestle over the Big Stormy. There was very little water in the canyon. It seemed that the storm had moved over to the western slope of the divide, there back of Frowsy Head.

Bill started down the track toward the Narrows. Rain began as he reached milepost 105. A squall was coming off Jawbone.

NUMBER 1, the crack westbound limited, came doubleheading up the grade from Paraje. Her two big Mountain-type locomotives roared full-throated in the night. Rain slanted across the headlight of the first engine in gusty sheets. Gray rivulets spewed from the rocky slopes.

The flicker of a lantern near milepost 106 announced that Carnegan, keeper of the pass, was guarding the rail. Two brief whistle blasts cracked the salute of No. 1. Blurred faces in the cabs looked down and muffled voices shouted greetings at him.

Bill yelled, waved his lantern, and started back. He had gone perhaps a mile when he detected a new note menacing the night. He stopped for a minute to listen, then went on with a quickened pace. He had felt so sure that all danger was past, there at the Big Stormy. But now a grim premonition laid hold of him. A quarter of a mile farther on, he paused again. Faintly a dull roar came to his ears above the noise of wind and rain. It was ominous. He had heard it before. It was not unlike the rumble of an approaching freight train, drifting down the grade.

Bill broke into a run. A cloudburst was coming down Big Stormy Canyon. Frequent squalls had softened the approaches to the trestle. Only the day before some section men had worked there, filling in those little gullies cut by coursing rivulets. It wasn't the structure itself for which trackmen felt concern, but those fills behind the concrete abutments.

The rain was slackening now. And yet the thunder of tumbling water grew louder. There were, too, the crash and grind of trees and boulders against cut-bank canyon walls, gouging brittle earth, as the increasing accumulation of debris was hurled along in the teeth of the mounting flood. Somewhere sodden clouds had emptied themselves high in the mountains—the last mad caprice of the storm. Even now stars were peeping through around Frowsy Head.

When at last he neared the Big Stormy, Bill was close to exhaustion. He had long since discarded his cumbersome raincoat and boots. His feet were cut and bruised from the rock ballast.

He glanced at the light in the window of his home as he stumbled on past the little building beside the track. It seemed to give him renewed strength. He felt that Ann was close beside him. As Bill approached the trestle, muddy water met him. It was coming down the right-of-way ditches, creeping over the ties. A wide sweep of it spread before him, a veritable river, flowing, gurgling about the steelwork.

Minutes were precious. Every second that ticked away was a step toward eternity. If No. 6 were on time, she was already getting close. Not a month before, the schedule to Chicago had been cut two hours, while newspaper and magazine advertisements boasted of this new fast service.

Water poured across the rails like a mill-race. It clutched at his legs with devilish ferocity, trying to drag him down. A foot dropped between the unseen ties. Already the earth was crumbling. The fill had started to go!

Bill pitched forward. Something in his leg snapped. Blinding pain stabbed him. He felt himself being swept away. He caught at the submerged rail, now a foot beneath the coursing flood. The lantern and a fusee he had gripped in his left hand were lost.

Death held no dread for Bill Carnegan. And yet tonight a grim determination filled his heart. It was not himself of whom he thought, but the railroad and the men and women whose lives he guarded.

He was going to cross the Big Stormy! A fighting Irish heart carried him forward, foot by foot. Smashed and buffeted by muddy water that tried to drag him down stream, Bill struggled on. Ever in his ears sounded the roar of the torrent.

His right leg dragged uselessly. He advanced on hands and knees. A tree came floating down the gorge, its torn roots writhing, flailing like the menacing arms of an octopus. The trunk swung toward him in the gloom. He sought to get clear, but a jagged limb stub struck him on the head, opening an ugly gash.

Desperately Bill wedged his knee against the guard rail and clung there, grasping. He fought dizziness. Then once more he crawled on. Gone were lantern and fusee. Every last match had long been soaked past all usefulness. Even if the former hoghead could reach that west bank of the Big Stormy and solid ground, he had no means of attracting the attention of the engineer at the throttle of No. 6. They'd never see him in time.

And yet in the brain of Bill Carnegan burned a spark that would not die. In his ears, above the din of waters, he thought he heard the low, sweet voice of the girl he'd wooed and won back in old Rhode Island. Now he was going to keep a rendezvous with her—there by that mound, and the cross, ahead. Something carried him on, something that lifted him across those last flood-torn rail-lengths to solid ground across the Big Stormy.

NUMBER 6 was on time. Two engines over the Sangre del Salvadores and fourteen all-steel cars—mail, express, and Pullmans. Crazy Creek Canyon reverberated to the staccato bark of the exhausts and the drumming of steel on steel. Lght rain was falling. The fringe of the storm had swung toward Thunder Mountain.

Charley Donaldson, a veteran runner of the Canyon Division, was at the throttle. He had been watching the lightning flashes out ahead.

"They been getting hell in Canyon Pass," he called to the fireman.

The ashcat ceased his labor on the deck for a little while and stood beside the engineer.

"Anyhow, it ain't like the old days," he said, "when there was a wooden trestle over the Big Stormy, and the Mex trackwalker was more likely than not pounding his ear in the shanty."

"That's right, my boy," the hogger responded fervently. "Carnegan is out there now looking after the track. When we bat 'em over the hump and start rolling down the mountain, we know that everything's okay."

"It was mighty tough, Carregan losing his wife the way he did."

Donaldson sighed. "It sure was."

"You know, Charley, the grave kind of gives a funny feeling. Doesn't it?"

"Why, I dunno. I sort of think of Mrs. Carnegan as being there beside the track," Donaldson said, "just watching over things."

The fireman agreed. "Yeah, that's right. Bill and her. My God, it must be awful lonesome for him."

Number 6 swung at last over the high rim of the Sangre del Salvador. Lights shone from the windows, warm, inviting. Life on the train flickered past with cinema-like rapidity. A few travelers lingered in the dining cars. Men and women lounged at ease in club car and observation. Porters were busy making up the berths. An old man dozed in a section, a gray-haired woman beside him. A mother smiled down into a baby's face. A honeymoon couple sat holding hands, their heads close.

Charley Donaldson leaned across the padded arm-rest, his keen gray eyes squinting past the glass weather-wing along the track ahead. Two emerald dots hung like a pendant against a black velvet curtain.

He turned his head toward the left and sang out, "Green eye!"

And the fireman called back, "Green on the block!"

A stubby granite post whipped past. Milepost 103. The heat of the exhausts had quickened to a hurried mutter. Drivers and side-rods were but a clashing blur. Fast-rolling wheels were checking off the miles with a singsong clickety-click that measured the rail-lengths as one counts heartbeats.

Heavy cars cradled with gentle undulations that indicated smooth, swift flight. No. 6 was right on the advertised. Speed the watchword.

The big passenger-haulers heeled to the curve west of milepost 104. The silver beam of the electric headlight washed the steep slope to the right of the track in swift review. Juniper and piñon sprang out of the raven blackness, crouching shadows of boulder and gully, sharp-drawn striations in a red bank hewn by erosion.

On swept the far-reaching finger, like a spotlight hunting for figures on a darkened stage. And then, for just an instant, it seemed to pause, as though that which it sought had been found.

A GENTLY swelling knoll, back somewhat from the right-of-way, with a softening background of piñon. There was a cross, in that dim distance, like a tiny ornament hung on the swelling bosom of the mountain. Gleaming white.

Charley Donaldson never failed to watch for it, as his train swept over the rim of the Sangre del Salvador. His eyes were on it now in narrowed focus. Suddenly he became rigidly intent.

Something seemed to be moving close beside the mound. It was uncanny. The distance was yet too great to vision detail. Then came a sudden flash of red—a dull-glowing crimson eye. It moved back and forth. The headlight glare swept on around the curve, and it was lost.

Cold fingers clutched at the engineer's heart. The thing was weird, spectral. He lost not one instant in making his decision. He closed the throttle and snapped one short blast from the whistle, signaling the second engine to shut off. Then his fingers closed over the shiny, brass handle of the ET equipment. He swung it full to the right, *the big hole.*

It would take emergency air to stop them. Charley Donaldson sensed that if anything had gone wrong here in Canyon Pass, it was at the Big Stormy. Rain had been pouring hard out on the divide. There was always the possibility of a cloudburst. The engineer answered the strange smoldering eye of red with two quick blasts.

Bill's heart swelled almost to the bursting point as he heard the acknowledgment. They had seen his signal. No. 6 was stopping!.

The trackwalker forgot the agony of his tortured body as he saw that parade of fire-rimmed wheels on the curve. His soul soared to undreamed-of heights. He gasped a prayer of thanksgiving.

The Angel, indeed, had walked with him tonight, her spirit buoying him up, carrying him on, when it seemed that the best he gave would not be enough. She was here with him now.

The fireman peering ahead, yelled: "It's a washout! There's hell to pay in the Big Stormy."

The engineer's face turned pale.

"My God, look at it!" Awe was in Donaldson's voice. "The flood has cut around both abutments."

His headlight revealed the devastation of the foaming torrent. The big engines of No. 6 ranged on past a little. Then, with a last buckling surge, the train came to a stop, not a hundred yards from the Big Stormy and its murky death trap!

Charley Donaldson lighted his torch and swung hurriedly down, the roar of mad water in his ears. A miracle had saved them—a miracle, and Bill Carnegan. The hogger of No. 6 walked back and his flaring torch revealed the figure of Carnegan slumped down beside the cross.

Others came stumbling toward the spot—engineer and fireman from the helper, uniformed trainmen, men to whom the booming roar in the blackness meant that they had been riding into the valley of eternal shadow.

The waving tongue from Donaldson's smoky torch laid its yellow illumination over the scene. Faces were white, strained, as the group of veterans of the rail found themselves witnessing a scene that would linger in their minds on through the years.

Carnegan! That was the name framed by their lips. Carnegan, here beside the grave of the wife he had loved so much. Charley Donaldson handed his torch to his fireman and dropped down to slip his strong arm about Carnegan's shoulder.

"What happened, Bill?"

The trackwalker told them. He spoke with effort, slow-worded phrases that told of the storm and the sudden onslaught that had trapped him there to the east of the Big Stormy. He made small mention of his grim fight against the turbulent waters of the flood.

"I lost my lantern and fusee," he said. "But I knew I had one chance. Long ago, old Maggie Manyfeathers, the Indian women who came so often to see Ann, brought this—"

He still clutched in his hand the ruby-grained safety reflector, and he held it out.

"This piece of red glass," he went on, "and those other things there. It wasn't much, this piece of glass. But Maggie knew that Ann loved red, so she put it there. I—I—well, I figured you'd see the red, Charley," He looked at the engineer.

Donaldson slowly nodded. "I couldn't have missed it."

The Canyon Division wanted to erect a memorial—the Canyon Division, and the passengers who were on No. 6 that night. And so a beautiful white shaft was placed where the cross had been. On it was put a bronze tablet with the name *Carnegan* in bold letters, as a tribute for all to read, to a railroad man and his wife.

And thus they remain today, eternally on guard in the high rims of the Sangre del Salvador—Bill Carnegan and the Angel of Canyon Pass. ●

HOBBY CLUB

conducted by Sy Reich

A HIGHLIGHT of last summer's Heritage Park Railroad Days at Calgary, Alta., was the dedication of Canadian Pacific car 76, formerly the Northern Alberta Ry. *Dunvegan*, donated to the park for preservation 8 years ago. Discovery of a photo of the car at Craigellachie on Nov. 5, 1885, the day the last spike was driven on CPR transcontinental line, led to the decision to undertake a costly interior and exterior decoration.

Any visit to the Park is a sentimental journey into the past. Exhibits include engine 6269 pulling cars on a one-mile railroad, restored homes, shops, a school, church, a ranch with crops and farm animals, and a newspaper office with printing press. Park general manager Dave Turner says the area is home to Canadian objects originating from as far east as Winnipeg. To be eligible for inclusion, exhibits must predate 1914.

Jim Crimmins of 6 Bonnie Dr., Exeter, N.H. 03833, has resumed work on a Boston & Maine history for book publication and wants to contact anyone who can supply factual material, anecdotes, or photos.

Chicago Great Western Historical & Technical Club has been formed for uniting railfans interested in the CGW and predecessors. A publication is being distributed by Randy Garnhart, 2931 Northmoor Dr., Rockford, Ill. 61109. For details send him SSE.

Norfolk & Western employee John V. Veverka of Marblehead, Ohio, is a modern-day treasure hunter. He still uses a shovel and pick to find old artifacts, but a metal detector has replaced the treasure map as his guide. John, a repairman at Sandusky car shops, is fascinated with history, especially Civil War lore. When he discovered several years ago that a prison for Confederate officers had been located on Johnson's Island near his home, he started a search that yielded a showcase of uniform buttons, silverware, minnie balls, and parts of rifles. A tag inscribed "Kunzmann Hotel" interested a local woman. Shortly after he found it, John met a Sandusky lady who said her great grandfather had run a hotel by that name during the Civil War. In answer to many who want to buy his collection, John says: "This provides fun. I'd never sell it."

E. C. Eddy of Fairview, Mich., lumberman and railfan, has returned a little of the glory of the old-time steam logging lines in the pine and hardwood forests of Oscoda County. He has a one-quarter scale Hudson loco that takes 300 gallons of water to fill her boiler and 3 hours to generate enough steam to pull the Pinconning & Blind River R.R. passenger load through the gently sloping woodlands. The line functions during weekends from Memorial Day through early October, on 2½ miles of track through dense underbrush, over trestles, through tunnels, along streams and ridges in an area where wildlife abounds. Eddy's wife, Helen, runs the depot and doubles as ticket seller and conductor. A museum exhibiting railroad memorabilia and logging tools of early Michigan adjoins the station and is free to the public.

Mid-Continent Ry. Historical Society's ex-Montana Western engine 31 helped EMD to celebrate its 50th anniversary at McCook, Ill. No. 31 is one of three surviving EMC Winton-powered gas-electrics, the only one with a St. Louis Car Co. body.

Coins have been minted as souvenirs for the Centennial of Wilmington & Western R.R. Contact Historic Red Clay Valley, Inc., P.O. Box 1374, Wilmington, Del. 19899.

Charles Eckerson is a freight conductor on Burlington Northern's Alliance Division, but on alternate days he runs his own railroad empire in and around Casper, Wyo. His trackage extends from the garage in his backyard to the sidewalk in front of his house. He usually presides over his train on 520 feet of track located in the nearby town of Mills. Rolling stock consists of a scale model coalburning loco and six cars. The loco is one-

Jim Seacrest, 2101 Birchwood Rd., North Platte, Neb. 69101

A severe cold spell two years ago at North Platte proved too much for Union Pacific depot boilerhouse (at right), so the railroad company moved in passenger unit E9 No. 955A to provide steam temporarily for the depot and passenger yard.

Car 83 of Niagara, St. Catherines & Toronto Ry. at Beaver Dam in Thorwold, Ont., Canada, on March 29, 1957, the day after the line's passenger service ended.

Photograph by Stephen D. Maguire

eighth the size of the 1927 Burlington Atlantic from which she was modeled. She weighs slightly more than 1,000 lbs. and builds up 125 lbs. of steam, pulling the midget train at 20 mph. Each car is about 7 feet long, 20 inches wide, and 30 inches high. Chuck values his steamer at $8,000.

Ex-Soo Line No. 2645 that has been in Frame Park at Waukesha, Wis., since 1957 may become an "atmosphere" piece at a Gay 90's restaurant planned in the former C&NW depot nearby. Title to 2645 remains with the city, with custody reverting back to the city should the restaurant, if built, fail.

After more than 25 years since its discharge from the service, the 719th Railway Operations Bn. of World War II is still trying to contact former members of the old outfit. The present membership roster exceeds 300 out of an original 800 men. Active or retired veterans of the 719th should contact Secretary-Treasurer Rodney E. Runsteen, 12620 W. Dodge Rd., Omaha, Neb. 68154.

No. 82, a four-wheeled switcher built by Rock Island in 1884, has been donated to Pacific Southwest Ry. Museum at San Diego, Calif., and is stored on a spur track at nearby National City. The little 0-4-0 was once owned by Union Sugar Co. of San Francisco. She was last operated as Pacific Gas & Electric No. 5 at Bartell, Calif., in the 1940's. Railfan Jerome Williams, president of Scrap Disposals, Inc., who bought her some 25 years ago, found that his work schedule kept him from doing anything with the loco, so he gave her to the museum. "The 28-ton engine will be repainted and restored," says H. Chalmers Kerr, Jr., president of the museum, which now has 5 steam locos, 2 passenger cars, 6 old freight cars, and 2 rail-buses.

Michigan Railroad Club member Michael F. Erdody, after visiting Hawaii, reports on the Lahaina, Kuanapali & Pacific R.R., a colorful attraction operating a restored 1890-era narrow-gage train on 4 miles of track connecting the Kuanapali resort area with the town of Lahaina. It is the only passenger railroad extant in the State of Hawaii and is similar to those that once served island plantation communities.

Penn Central is offering railfans some nice souvenirs. A group of 8 reprints of old posters and timetables for $2, a 12x15" reprint of an 1837 Pennsy poster ("From Philadelphia to Pittsburgh-Through in 3½ days!") for $1, PC green luggage tag for $1, PC tie-bar or tie-tack at $2.25 each, etc. Contact Penn Central Souvenirs, 1040 Six Penn Center, Philadelphia, Pa. 19104.

Railfan Rod Wendell, an electrical and plumbing contractor of Gourie, Iowa, has refurnished an old Rock Island caboose with a pot-bellied stove, an assortment of kerosene lanterns, and other artifacts. One prize is an agent's pendulum clock from El Reno, hung in the cupola. The walls are lined with railroad calendars, while the shelves hold, among other things, a collection of souvenir demi-tasse cups and mugs from various roads. Rod has one item in his caboose that no working crummy ever had—wall-to-wall carpeting.

One of the last members of a famed Norfolk & Western marching band, Tom B. Stultz, retired recently as a tinner in the Roanoke shops after almost 56 years with the road. He managed the band for almost a decade. The only other surviving band member in Roanoke is former drum major Jim Parrish. Formed in 1893 by Roanoke shop men, the band made hundreds of appearances at parades and festivals. In 1953 the company disbanded it. Anyone know of other railroads which had bands or orchestras?

You might call retired CP Rail station agent W. C. McCarger a small-scale artist; he paints pix of railway subjects in miniature. His paintings range in size from large postage stamps to postcards. He took up the hobby at 53. With encouragement from Kenneth Lockhead, a wellknown Canadian artist, he has turned out more than 300 pictures. Many were exhibited in Canada and the U.S.

While making a correction in our Burlington roster (Dec. '72), the printer compounded the error. Road number listing "9985B-99849" should be "9985B-9989B." ●

BOOKS OF THE RAILS

by GORTON T.H. WILBUR

HISTORY OF THE LOUISVILLE & NASHVILLE RAILROAD, by Maury Klein, 572 pages, 6½x9½", hard cover, illustrated, The Macmillan Co., New York City, $10.95.

This giant-size, detailed, and well-anecdoted account of a colorful railroad system that played a major role in the Civil War is told in such a way as to fascinate not merely Dixie readers but railfans in general. Now that an earlier book, *Louisville & Nashville Railroad 1850-1963*, by Kincaid A. Herr, unfortunately is out of print, we predict that its successor will have a tremendous sale. Maury Klein, who is an associate professor of history at the University of Rhode Island and author of *The Great Richmond Terminal*, is well qualified for the job of research and

writing that you will find in his latest chronicle. The text matter is entertaining as well as authentic. Supplementing it are 70 photographs (most of them not so good, however) and numerous charts, financial data, a bibliography, and an index. The book is thick enough to fill a wide space on your library shelf.

THE DELTICS: A SYMPOSIUM, by Cecil J. Allen, 63 pages, 5½x8½", hard cover, photos, rosters, diagrams, Terminal House, Shepperton, Middlesex, Walton-on-Thames, England (WT) 28484. Price is one pound 50 pence.

In this work by one of the world's most outstanding railroad authors, a panel of experts, headed by Allen himself, has collected and interpreted a mass of historical and technical data on the Napier Deltic diesel-electric design that British Rail is famous for. To steam lovers, of course, it is a "No, no"; but here diesel fans will uncover buried treasure of a sort. The book is enhanced by 24 pages of halftone pix.

NEW YORK CENTRAL CARS, 70 pages, 11x8¼", soft cover, photos, Wayner Publications, Box 871, Ansonia Station, New York, N.Y. 10023, $6.95.

Bob Wayner, who has contributed much to rail lore—including a book which editors, writers, and researchers find especially useful, *All-Time Index of Railroad Magazine, etc.*—now offers a gem to fans interested in NYC rolling stock—many of them are. Among the illustrations are some interesting shots of doodlebugs that have rarely, if ever, appeared in other literature. The new book is a valuable reference work. Incidentally, Bob's book on *Great Poems from Railroad Magazine* is temporarily out of print, but he says another edition will come out soon.

HO RAILROAD THAT GROWS, 63 pages, 8¼x11", soft cover, photos, diagrams, Kalmbach Publishing Co., 1027 N. 7th St., Milwaukee, Wis. 53233, $2.

First published in 1958, we now see an extensively revised second edition designed to update model building techniques of the first.

B&M BULLETIN, FALL ISSUE, VOL. 2, NO. 1, 16 pages, 8½x11", soft cover, photos, diagrams, rosters, Boston & Maine Historical Society, Inc., P.O. Box 302, Reading, Mass. 01867, 75¢.

Steam fans say that *B&M Bulletin* lately has been topheavy with diesel pix. This new issue, otherwise good, is all diesel.

Our Cut-Rate Book Service

As a service to readers, we sell books at about 5 percent off publisher's price. Our discount applies to almost any English language railbook still in print if it retails at $3.50 or more. Allow from 4 to 6 weeks for delivery.

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The books are available only by mail. *Railroad Magazine Book Service*, 205 East 42nd Street, New York, N.Y. 10017. Here are a few suggestions:

	List Price	Our Price
HISTORY OF LOUISVILLE & NASHVILLE, Klein	$10.95	($10.40)
400,000 MILES BY RAIL, by Blanton	$ 8.50	($ 8.05)
NARROW GAUGE RYS. OF CANADA, by Lavallée	$11.95	($11.35)
MILWAUKEE ROADS WEST, by Wood	$14.95	($14.25)
THE SEARCH FOR STEAM, by Collias	$15.00	($14.25)
ELECTRIC RAILWAY DICTIONARY, (reprint)	$19.95	($19.00)
PIKE'S PEAK COG ROAD, Morris Abbott	$12.95	($12.35)
WORKIN' ON THE RAILROAD, Richard Reinhardt	$ 8.95	($ 8.50)
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GREAT POEMS OF RAILROAD MAGAZINE	$ 4.95	($ 4.70)
BESSEMER & LAKE ERIE, 1869-1969, Beaver	$10.00	($ 9.50)
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CANADIAN NAT. STEAM POWER, Clegg and Corley	$12.95	($12.30)
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STEEL RAILS TO SUNRISE, Ziel and Foster	$12.95	($12.30)
STEEL RAILS TO VICTORY, by Ron Ziel	$14.95	($14.20)
GREAT LAKES CAR FERRIES, by Geo. Hilton	$ 6.00	($ 5.70)
THE OVERLAND LIMITED, by Lucius Beebe	$ 5.95	($ 5.65)
THE MA & PA, by George W. Hilton	$ 5.00	($ 4.75)
THE RUTLAND ROAD, by Shaughnessy	$10.00	($ 9.50)
THE PULLMAN SCRAPBOOK, Wayner	$ 4.95	($ 4.70)
COMMUTER RAILROADS, by Dorin	$12.95	($12.30)
LOCOMOTIVES OF DICKSON MFG. CO., Gerald Best	$10.00	($ 9.50)

THE SWITCH LIST

DAVID HAMLEY (next month's Interesting Railfan), 121 LaCrosse St., Pittsburgh, Pa. 15218, sells many shortline, industrial, and mainline orig. loco slides. Big list, 16¢ in stamps.

ROBT. OAKLEY, Box 113, Apache Jct., Ariz. 85220, buys, trades rr. and express wax sealers; sells Wells Fargo of Mexico coin bags.

MIKE EAGLESON, 37 Edgemere Ave., Mt. Arlington, N.J. 07856, will sell one 2-vol. set "Colorado's Mt. Railroads," loaded with steam pix, $10 ppd; also German steam loco DB cab plate, $50 ppd.

ROGER ARCARA, 1432 Leland Ave., Bronx, N.Y. 10460, sells reconditioned cameras, sizes 120-620 and 116-616, for large oblong negs.; details free.

ARNOLD JOSEPH, 2512 Tratman Ave., Bronx, N.Y. 10461, sells back issue Railroad Magazine, other rail periodicals.

LOU GEORGE, 7 Eldred St., Middletown, N.Y. 10940, sells stock certifs. of NYO&W and other roads.

ED DE MARCO, 1428-85th St., Brooklyn, N.Y. 11228, will sell 190 Railroad Magazines, 1933-'70; make offer, incl. shipping cost.

JOHN STONE, 6810 Chambers Ave., Cleveland, Ohio 44105, offers 12 diff. rr. pencils, $2.50 pp.; NKP Adlake 3½ blue or green kerosene hand lantern, $18.50 ppd.

DOUG HAWES, 6708 Wilton Dr., Oakland, Calif. 94611, will buy '72 Ry. Equip. Reg., Railroad Magazine for Aug. '63, June '65, Sept. '66; Diesel Spotter's Guide.

DAVE NESTLE, R.D. #2, Ray Rd., Greenwich, N.Y. 12834, big list of railroadiana for sale, 25¢, refundable.

PAUL DOUGLAS, 12 W. 21st St., Vancouver, Wash. 98660, wants Northern Pacific negs. of classes D,E,F,H,I,J,K,O,U,V.

DAVE BUSSE, 675 W. Lockwood Blvd., Webster Groves, Mo. 63119, wants b&w prints, negs. Ill. Terminal trains approaching St. Louis Station.

CHUCK DAVIS, 1152 Surrey Crescent, Norfolk, Va. 23508, wants pix, info. on LV pass. cars; "Eastern Steam Pictorial," new or used.

BOB CHILCOTE, 706 Johnson Ave., Bedford, Ohio 44146, wants lanterns, locks, keys, badges, buttons, etc., from Ohio interurbans.

RON STAFFORD, 102 Cove Dr., Edinboro, Pa. 16412, buys color slides, blueprints, copies of accurate maps showing Erie, Pa., Union Station interior.

STEVE WOOD, 173 Briarwood Dr., Berkeley Heights, N.J. 07922, buys post '68 EL, PC, Amtrak emp. tts., rulebooks. Makes pix of EL (N.J. only) to order.

ED CONKLIN, 5 King Arthur's Court, St. James, N.Y. 11780, will sell 1923 Porter 0-6-0 steam loco, PRR and NYC lanterns, PRR glasses, sw. locks, bldr. plates. (SSE)

PAUL NOBLE, 1 Remsen Rd., Yonkers, N.Y. 10710, sells color pix PC electric and diesel power, LI FA's, B&O, LV, EL cabooses (SSE).

RON LEITH, 18707 Ferncliffe Ave., Cleveland, Ohio 44135, will sell 1922 Car Bldrs. Cyclo. $46, "Compl. Book of Model Railroading," by Hertz, $10: "The Railway," by Schielddrop, $3.

JEFF BRASHARES, 5710 Winton Rd., Apt. 204, Cincinnati, Ohio 44304, wants rr. advertising buttons, trolley uniforms, badges. List of railroadiana, 10¢.

KEN PRAG, Box 607-R, Hermosa Beach, Calif. 90254, buys, sells old rr. stock and bond certifs. Large list plus old rr. stock certif., $1.

STEVE MAGUIRE, P.O. Box 51, Belmar, N.J. 07719, will sell 47-pg. Pacific Electric system tt. for July, 1911, to top bidder. Has 25,000 negs. of trolleys in N. America; sells prints from any, 26¢ ea.

J. SCOCCA, 219 Miami Ave., Cherry Hill, N.J. 08034, sells Railroad Magazine and Trains. (SSE)

D. SULLIVAN, 2009 Inlet Point Rd., Norfolk, Va. 23503, will sell 1941-'48 Railroad Magazine, Trains, B&O, N&W mag.

J. TERRELL, Box 31, Telluride, Colo. 81435, buys, sells, trades emp. tts., rulebks. much US, Canada, Mexico railroadiana. (SSE)

M. HAHN, 139 Richards Ave., Maple Shade, N.J. 08052, sells old off. PRR wall maps, full color, 20x40", $1.25 each.

C. BUTCHER, 8 Coyne St., St. Thomas, Ont., Canada, sells C&O steam, diesel pix; list 15¢.

ROBT. REID, Box 179, East McKeesport, Pa. 15035, needs pix, info. on PRR Baldwin Centipedes, also PRR, NY Alco FAI, FA2, for new bi-monthly PC Railroader.

ROBT. WASCHE, 205 Lafayette Pl., Brigantine, N.J. 08203, sells back issues Railroad Magazine, Trains, Model Railroader, etc.; some pages missing in 1939 issues; any offer considered.

CARL ROMER, 361 N. Pratt St., Orrawa, Ohio 45875, will sell back issues Railroad Magazines, 1946 to date.

STAN CREWS, 5745 Azalea Garden Rd., Norfolk, Va. 23518, sells Railroad Magazine 1934 to date; Trains 1947 to date. (SSE)

SETH BRAMSON, 8035 Cecil St., Miami Beach, Fla. 33141, buys dater dies, wax seals, uniforms, lanterns, keys, all trolleyana.

CARL GAY, 506 Oakview Ave., Winnipeg, Man., Canada, sells p.c. size steam pix, Canada and U.S.; free list.

H. MOYNIHAN, Box 35099, Nae Nae, New Zealand, will send first-day covers, stamps, in exchange for North American rr. stamps, envelopes, rr. playing cards.

DAVID KELLER, 5473 Express Drive North, Holtsville, N.Y. 11742, buys LI negs.; trades old train orders for Boy Scout badges, lapel pins, handbooks.

G. PORTELANCE, 1430 St. Mark, 1007, Montreal 108, Canada, will sell to top bidder tts. of CN eastern, CP nationwide, D&H Montreal-N.Y. 1958.

ALDEN MILLER, 3212-34th Ave. S., Minneapolis, Minn. 55406, wants complete file, even singles, R&LHS Bulletins on Midwest rr history.

R. GRANDZOL, 7797 Hasbrook Ave., Philadelphia, Pa. 19111, buys good copy of "Reading Steam Pictorial."

ROGER PLAQUET, R.R. 7, Chatham, Ont., Canada, buys old brass switch, signal, and express locks; also trades.

L. WHYTE, 5175 Cliffridge Ave., North Vancouver, B.C., Canada sells Canadian steam, diesel pix, b&w and color. Lists and samples, $1.

HAROLD ESTUDILLO, Jr., P.O. Box 3033, San Jose, Calif. 95126, SP Alco PA F7's FM Trainmaster, set of 6 5x7, $2. No list; state wants.

TOM COVAL, 21 E. Robin Rd., Holland, Pa. 18966, wants old, rare, colorful tts., also rr. literature; sells clear plastic tts. 14¢ each.

KIM PIERSOL, 107-B Colonial Dr., Shillington, Pa. 19607, buys RDG slides, negs.

MIKE McDONALD, 706 W. Knoll Dr., Los Angeles, Calif. 90069, will buy Amtrak 5/1/71 nationwide tts., will trade trn. orders my area for yours.

JOHN STUBBLEFIELD, P.O. Box 666, Maroa, Ill. 61756, sells 35mm slides midwest roads; list and slide 50¢.

M. DEV, 15265 Winchester Blvd. 8W, Los Gatos, Calif. 95030, buys b&w negs. of any Milw or GN electrics.

DON WATSON, 16 Fulford Pl., Weston, Ont., Canada, wants T&P railroadiana.

AL SHARP, 100 Shennecosett Pkwy., Groton, Conn. 06340, sells rulebooks, rare R&LHS Bulletin No. 1; loco tech. manuals; financial, traffic, historical books; lists 50¢.

JIM REID, 4584 Brentlawn Dr., North Vancouver, B.C., Canada, wants pix of CN, CP stations in Alta., Sask., Man.

MIKE TEDESCO, Box 641, Painesville, Ohio 44077, sells orig. 35mm slides of PC, N&W, EL, eastern roads or trades for those in your area. (SSE)

K. OWEN, 3820 Cullen Dr., Cleveland, Ohio 44105, wants NY pass. car directory with their 2-tone gray lightweights.

DICK RUPERT, 8702 S. Glenview St., Omaha, Neb. 68128. will buy rr. lanterns and marker lamps. Send details. (SSE)

J. SEIDL, 1811-17th Ave., Menominee, Mich. 49858, sells orig. 35mm color diesel slides on approval of CP, AC, WP, SP, D&H, SCL, C&NW.

RICH SLATTERY, 82-46 135th St., Kew Gardens, N.Y. 11435, buys, trades for tts. D&RGW 1941-'42, 1963-'67, others. Buys short line tts.; sells tts. (SSE)

DAN PROUT, 21 Blade Way, Walnut Creek, Calif. 94595, sells stationary illust. with side rendering of 1924 WP 4-8-2 177 mountain loco, $1.40 package of 50.

J. ANGEL, 2948 Oxford Dr., Bettendorf, Iowa 52722, sells Trains, 1956-'57, excel. cond. $15.

GEO. BALLARD, 128 S. Madison St., Princeton, Ind. 47670, sells lanterns, keys, locks, buttons, tts.; list 25¢.

E. METZ, Ordi Box 249EG, Harrisburg, Pa. 17111, buys, trades train orders, esp. NYC, Rut. D&H, PC, and NE roads.

ROBT. HARDING, 40 Beach St., Marblehead, Mass. 01945, will sell ex-NYO&W complete bell (small crank), telegraph set, some sw. lanterns, 100 steam NH negs. 4¼x2¼.

JIM DAVIES, 78 Warre Pl., Ridgewood, N.J. 07450, sells railroadiana of PC, PRR, NYC, Erie, EL LI, shortlines. (SSE)

RAY DESCHENES, 903 Mohawk Rd. E., Suite 305, Hamilton, Ont., Canada, sells 3½x5" to 11x14" steam pix CN, CP; list 30¢.

JIM KRAMER, P.O. Box 284, Worcester, Pa. 19490, buys pre-1960 emp. and pub. tts. of any northeast rr.

BILL BEDELL, P.O. Box 8026, Greensboro, N.C. 27410, trades 35mm slides of my area for slides of your area.

ED CONNER, Catharpin, Va. 22018, sells 25-page booklet on Southern Ry., Wash. Div. folklore, $3.25.

CECIL CHURCH, 216 Rideau Terrace, Ottawa, Ont., Canada, KIM-OZ2, buys, trades, Alco, Baldwin, Lima, other steam bldrs.

CHUCK HALL, Antrim, N.H. 03440, will sell 700 postcards of old time New England rr. scene. (SSE)

DON MOTE, 8546 Brunswick Ave., Riverside, Calif. 92504, will sell or trade Southern Pacific n.g. track spikes, bolts, tie-plate, grab-iron, authentic Owens Valley.

DICK DAWSON, 2523 Merribrook Rd., Wilmington, Dela. 19810, will sell 1922, '25, '27, '30, '38, '41, '44, '47, '51, '56 Loco. Cyclo. for best offers.

TONY HANNOLD, 52 Lake St., Hammondsport, N.Y. 14840, sells passes, tts., buttons, tkts., Off. Guides (SSE).

JOHN FERRICK, Rte. 4, Box 77, Ft. Pierce, Fla. 33450, wants RR. Model Craftsman, 1950-'55.

ROBT. JORTBERG, Pheasant Hill Rd., Cape Elizabeth, Me. 04107, wants info. on Worcester Nashua & Portland, Sanford & Eastern.

DON WOODS, 8380 Riverside Dr., Novelty, Ohio 44072, will sell rare NKP 110-pg. "Along The Line," $4.50; also 28-pg. "The NKP Road," by White, $2.25.

G. BOLINSKY, 435 Alameda Ave., Tacoma, Wash. 98466, wishes to contact 35mm camera fans in Nashville, Elizabethton, and Oak Ridge, Tenn.

JOHN HILTON, P.O. Box 125, Silver Spring, Md. 20910, sells 1953 P&WV rulebks., mint cond. (SSE)

GENE PERRYMAN, Lot 1104, Kendrick, Ida. 83537, will pay good price for NP or BN parts book listing all phases of operation.

J. ARMSTRONG, Jr., 4 Fisk St., Adams, Mass. 01220, sells diesel negs. of western Mass., and eastern N.Y. roads. (SSE)

ED SPODOBALSKI, 610 Louann St., Pittsburgh, Pa. 15223, buys PC and PRR emp. tts., esp. those with gen. order stickers.

R. SMITH, 712 S. 8th St., Coshocton, Ohio 43812,

Ads in our *Switch List*, including *Model Trading Post*, were free for 41 years. During that long time, few railfans ever supported this magazine with cash advertising. (How many *paid* ads do you see in our current issue?) But production costs keep rising. To meet this crisis, *The Switch List* is now a paid classified ad section, beginning in March '73 issue. Cost is 10¢ a word, including names, initials, numbers, cities, states or provinces. Zip codes free. Now you can let your ad run as long as you want. Minimum, 25 words per ad. Send check or money order with each entry to Bill Balgley, advertising manager, *Railroad Magazine*, 205 East 42nd Street, New York, N.Y. 10017.

sells rr. lanterns, other hardware; list 35¢.

TERRY GEHRIS, 555 West St., Pottstown, Pa. 19464, trades RDG, locks and train orders for same in your area.

HARRY WYNN, Derry, Pa. 15627, sells PRR loco pix, plus Ligonier Valley 2-8-0 15, East Broad Top 0-6-0 No. 3, streetcar Desire, Pittsburgh cars.

HOWARD WORLEY, 713 Lafferty Dr., Pittsburgh, Pa. 15227, will trade P&WV emp. tt. No. 1 (1917) for P&WV tts.; sells P&WV steam loco diagram books.

GEO. BERGHOFF, Box 9254, Ft. Wayne, Ind. 46809, sells NKP Society calendars, $2.24 ea. ppd.; 3 for $6.

D. GALLO, 14 Fairview Pl., New Rochelle, N.Y. 10805 sells orig. slides of diesel switchers of eastern roads; b&w prints of PA's, FA's. (SSE)

FRANK SMITH, 83 Lawn Ave., Rockland, Me. 04841, wants Maine depot pix or postcards; will buy, trade, or copy, and return.

R. LOCKLIN, 135 W. 77th St., New York, N.Y. 10024, will trade 1946 and '49 Car Builders Cyclo. for 1938 and '49 Off. Guides.

D. MAYERS, Box 233, Maytown, Pa. 17550, trades PPR emp. tts. (East. Reg.) for other PRR, PC divs. or rrs.; buys PRR station name signs.

CLINT ANDREWS, 4231 S.W. 38th St., West Hollywood, Fla. 33023, sells station, diesel, steam, car pix of LV, RDG, CNJ, PRR, L&NE, etc. (SSE)

D. VOYTANIC, Box 19, Chicago Ridge, Ill. 60415, buys diesel and steam bldrs. plates, pass. train drumhead signs, diesel rr. herald nose emblems.

STAN ORR, P.O. Box 97B, Stormville, N.Y. 12582, sells back issues Railroad Magazine, Trains, MR, RMC, etc. (SSE)

IRENE VOGEL, 5610 Walther Ave., Baltimore, Md. 21206, sell steam loco brass bell complete with rocker, wt. 190 lbs., for best offer over $350 FOB.

STEVE HUBBARD, 16344 Comdon Rd., Albion, Mich. 49224, wants LS&MS info.

T. SMITH, 24 Park Place, Saratoga Springs, N.Y. 12866, wants 1967-'71 LV, UP, SP, CNJ emp. tts.; 1940-'58 B&M tts.

DICK ANDERSON, 334 S. Prindle, Arlington Heights, Ill. 60004, sells size 116 negs. of pass. and head-end equip. pre-Amtrak.

PAUL McDONALD, 1423 W. 2nd St., Waterloo, Iowa 50701, sells UP lounge car mag. covers; Santa Fe lounge car book ends. (SSE)

CURTIS CARLOUGH, 29 Rea Ave. Ext., Hawthorne, N.J. 07506, buys Erie, NYS&W, L&NE, L&HR, CNJ, D&H, LV tts., emp. tts., b&w pix, slides.

BOB YANOSEY, 40 Hendel Ave., North Arlington, N.J. 07032, sells quality negs. of eastern diesels, on approval. (SSE)

LYMAN ROBERTSON, 717 North Main, Las Cruces, N.M. 88001, sells or trades Santa Fe cross tie date nails. (SSE)

TED TAETSCH, 14218 Garfield Ave., Lakewood, Ohio 44107, sells old-time 3x5" trolley pix, any state. (SSE)

FRANK REILLY, 306 Front St., Dunellen, N.J. 08812, will buy PC auction catalog, or trade special 1969 CNJ Loose-leaf tt. in mint cond., per catalog.

PHIL SIMMS, R.D. 1, Montgomery, N.Y. 12549, buys L&IR railroadiana, U&D lantern; trades NH, Erie lanterns.

JON NELSON, 9911 W. Broadview Dr., Miami Beach, Fla. 33154, buys, trades anything FEC, or Fla.; buys, swaps, sells all tkts., RPO cancellations.

R. LAKOFSKY, 4975 River Rd., Perry, Ohio 44081, sells recent German steam 8x10" pix.

JIM McKEE, 7902 Shadywood Lane, S.W., Tacoma, Wash. 98498, buys action shots, slides D&RGW rotaries OY, OM, OO; C&S rotary 99201.

BRYAN FAY, Box 14, Newtown Square, Pa. 19073, sells, trades tts. of 60's and 70's.

ROBT. HINES, 1850 Hartford Turnpike, North Haven, Conn. 06473, will sell PC emp. tt. New New Haven Reg. 2, 1/18/70, 272 pgs., for $3, or will trade.

MIKE ROSSI, 10 Williams Place, Medford, Mass. 02155, sells copies of Nat. Teen Railfan Assn. monthly pub.; sample copy, info. 20¢.

AL GUNDERSON, 427 Chicago Ave., Savanna, Ill. 61074, selling Railroad Magazine and Trains back to 1955. (SSE)

JOHN SMITH, 323 Park Ave., Mansfield, Ohio 44905, wants rr. or trolley uniforms, cap badges, lapel insignia, buttons, esp. Ohio lines or roads crossing Ohio.

RICHARD HORTON, 671 North Spring St., Everett, Pa. 15537, buys 35mm slides WM FA's, LV C-628's, Everett RR. No. 56.

R. DOLAN, P.O. Box 159, FP Station, Springfield, Mass. 01108, will sell B&M and other eastern rr. tts. or trade same for Railroad Magazines or sw. keys. (SSE)

Remember the old poem, "Just Empties Coming Back"? Well, here is B&O Geep 9, on a day in April '72, hauling 100 empty coal hoppers south near Uniontown, Pa.

David Coldren, 39 Wescroft, Reading, Mass. 01867

JOHN WALKER, 360 East Main, Rte. 20 East, Fredonia, N.Y. 14063, will buy pass. stepbox, drumhead, bell, whistle, headlight, other hardware, good cond. with rr. identified. Describe. (SSE)

ROBT. MARTIN, 104 Kring St., Johnstown, Pa. 15904, will buy July, Dec. 41 Railroad Magazine.

KENT HAMILTON, DeTour Village, Mich. 49725, will buy or trade rr. ashtrays, kerosene lanterns.

JIM PROKES, 7850 S. Kenneth St., Chicago, Ill. 60652, buys tts., dater dies, badges, brass lanterns.

WAYNE SCHENK, Box 195, West Seneca, N.Y. 14224, sells orig. colored slides of diesels; list, sample 27¢.

CHAS. GOOLSBY, 901 Beal #19, Charlotte, N.C. 28211, offers $2.50 for '72 Equip. Register, freight or pass., or will trade Off. Guides; wants AB&C pix.

DAVID SAUMS, P.O. Box 125, Hillsdale, N.Y. 12529, sells PC EMD, Alco, GE diesel pix. (SSE)

C. NULPH, P.O. Box 186, Lompoc, Calif. 93436, collects old steam postcards. Will buy "Colo. Road," "Colo. Midland," and "Rails Around Gold Hill."

ED GARDNER, 22 Garden Ave., Mountain Top, Pa. 18707, sells copies of 100-page book, "Collecting RR. and Trolley Tts. as a Hobby," $5.

JOHN SMOLEFF, 496 East 15th St., Brooklyn, N.Y. 11226, wants tkts. tts., pix, info. on city streetcars, interurbans in Terre Haute, Brazil, Clinton, Sullivan, Ind., and Paris. Ill.

DICK CARPENTER, Gregory Court, East Norwalk, Conn. 06855, trades track and signal layouts, PRR gen. order stickers with layouts, discontinued interlocking layouts.

RALPH MARSON, 8070 Busch, Centerline, Mich. 48015, will buy 1927 or 1928 Off. Guides; also Detroit traction material.

DICK JOHNSON, 840 Spring Grove, East Liverpool, Ohio 43920, will sell back copies Railroad Magaine, most months 1961-71.

JOE McMAHON, 15 Adrian Ave., New York, N.Y. 10463, sells Off. Guides 1964-'72.

WM. GORDON, 232 Beresford Rd., Rochester. N.Y. 14610, sells Dayton, Covington & Piqua traction pix. (SSE)

S. SMAILL, 3495 Patricia Ave., Montreal, 262, Quebec, sells Canadian diesel plates, other railroadiana. (SSE)

ROBT. KING, 3466 February Dr., Cincinnati, Ohio 45239, sells crosstie date nails of early 20's and 30's. (SSE)

WAYNE RHEINFELD, 1011 Neilson St., Far Rockaway, N.Y. 11691, buys lanterns, switch markers, globes with rr. markings, bells, headlights, whistles, locks, keys.

R. MINNIS, 1307 Pelletier, Apt. 306, Windsor, Ont., Canada, N9B 1R9, trades CNR, CPR, ETR, N&W, C&O, PC, GT color slides for those in your area.

T. HARRILL, 1018 Parkwood Ave.; Charlotte, N.C. 28220, sells SAL half-fare rr. permits issued to ministers in 1890's.

CHAS. GOODMAN, 5454 South Shore Dr., Chicago, Ill. 60615, sells NYC, PRR hvy. silverplate indiv. coffeepots, $35 ea.

KARL BURKHARDT, RD-3, Box 455, Gettysburg, Pa. 17325, buys or trades back issues Railroad Magazine; sells old Off. Guides and Equip. Registers.

HARVEY BASS, 287 Valley Rd., River Edge, N.J. 07661, sells EL, DL&W other eastern emp. tts. and Amtrak tts.; buys Erie tts. (SSE)

L. KING, 701 Washington St., Evanston, Ill., wants pix of steam locos used in 1941 pulling frt. up grade at Needles, Calif.

STEVE SMALLEY, 6129 Glade Ave., Cincinnati, Ohio 45230, sells rare pix of CG&P, IR&T interurbans, $1.50 ea. (SSE)

Mrs. MONYPENY, 3285 N.W. 30th St., Miami, Fla. 33142, good steam pix of U.S., Canada, Mexico for sale. (SSE)

C. BUTCHER, 8 Coyne St., St. Thomas, Ont., Canada, sells steam and diesel pix of GTW, CV; list 15¢.

WM. FAUSSER, 251 Raff Ave., Mineola, N.Y. 11501, sells Off. Guides, 1956-'72, other railroadiana. (SSE)

JAMES McDONALD, 60 Harrison St., Boonton, N.J. 07005, has Oct. '49, Jan. '50, Oct. '51, Sept. '52 Railroad Magazine, fairly good cond., to trade for older issues.

D. WORKMAN, Box 2219, East Chicago, Ind. 46312, will sell few pass. and emp. tts., '40's; PHB&NC emp. pass 1912, tkts.'s '12 and '18, tts. and steam pix for best offer.

C. SHERRY, 76 Gralia Dr., Springfield, Mass. 01128, will trade 35mm color slides, orig. and dupl. of NH, B&M, CV, PC locos and cars for those of Sou, ACL, SAL. Send sample for slide.

LESLIE BOULDEN, P.O. Box 392, Lathrop, Calif. 95330, sells Railroad Magazine 1944 to date, few missing; will incl. other rr. literature. (SSE)

ROGER TESKEY, 836 Windsor, Ont., Canada, trades orig. Kodak color slides of CNR, CPR, NW, ET, CO for those in your area.

GARY PARDUE, 120 Wesley St., Bluefield, Va. 24605, will buy oil fount and burner for 1913 Armspear and Adlake lanterns, one each.

BOB GREENAWALT, 3643 North Rosemead Blvd., Rosemead, Calif. 91770, needs 1920 Moody's Manual; has others for swap. Buys rr. stock certifs.

J. KEAN, Box 7082, Arlington, Va. 22207, sells Nat. "Capital Trolley Museum Guidebook," $1; "Railroads of N. Virginia," $2.75, and Kensington Trolleys, $1. (SSE)

GREG HENDRICKS, 97-34 80th St., Ozone Park, N.Y. 11416, will sell or trade Pullman-Standard brass bldr. plates.

WALT STRINGER, Box 1055, 1910 Caledonia Ave., Knoxville, Tenn. 37916, issues Southern Railfan newsletter; sample, 8¢ stamp.

ED CONKLIN, 5 King Arthur's Court, St. James, N.Y. 11780, sells signs, locks, lanterns, Porter steam bldr. and trust plates, other railroadiana. (SSE)

WALLACE LANGFORD, 1306 Broad, Wichita Falls, Texas 76301, will sell over 600 copies Railroad, Trains, Engineers Journal from 1940; good cond.; lot only. (SSE)

MIKE BILLET, P.O. Box 206, Red Lion, Pa. 17356, sells rr. antiques, collectables, etc.; free list.

MIKE McILWAINE, P.O. Box 641, Ridgetown, Ont., Canada, trades orig. Kodak 35mm color slides of CNR, CPR, PC, NW, CO, ET, for those in your area.

T. ATCHLEY, 409 South Independence, Amarillo, Texas 79106, buys rare date nails.

JIM ADY, 35 Hillside Ave., Apt. 1, Salt Lake City, Utah 84103, will pay big price for 1900 Colo. Midland moonlight cover pub. tt. Also wants SPLA&SL, Ton. & Tidewater, LV&T tts., emp. tts., adv. brochures.

R. SMITH, 246 Middlefield Drive, Akron, Ohio 44312, sells exact plastic replica builder plates: Baldwin rectangle, Lima, W&LE trust plate. (SSE)

FRED WORTHY, 412 N. Hickory St., Summerville, S.C. 29483, will sell Charleston Steam in stereo, $5.25.

CLARENCE CAMP, tell Harry Bennett, 1804 N. Mount St., Baltimore, Md. 21217, your present address.

MIKE DAVIS, 701 Grand Mesa Ave., Grand Junction, Colo. 81501, trades slides of pass. cars and trains, only Kodak orig. and dupl.

W. EDWARDS, 8414-8th Ave., South Seattle, Wash. 98108, selling European tram negs., 25¢ ea. and up. Wants pass. tts. of N. American trolleys, trolleybuses, 1920-'30.

J. MEYER, 515 West 28 St., Vancouver, Wash. 98660, will sell 25/32", 1 to 1¼" bore steel barrel Civil War Naval type operating cannons, or trade for railroadiana. (SSE)

FREEMAN HUBBARD, c/o Railroad Magazine, 205 E. 42nd St., New York, N.Y. 10017, will sell 1 copy ea. of hard-cover books: "Diesels West" (Burlington), by Morgan, 164 pages, illust., $4.50; "Directory of Ry. Officials & Year Book: 1966-'67," 842 pages, $2; "Northwestern Pacific RR.," by Stindt, Dunscomb, 272 large pages, 514 illust., maps, roster, index, autographed by author, weighs 2¾ lbs., $10; "Nevada County Narrow Gauge," by Best, 216 large pages, 284 photos, maps, rosters, index, $6.50; "Railroads of Nevada and Eastern Calif.," Vol 2, by Myrick, 933 large pages, 500 illust., rosters, index, $8.50; "Rails from West," by Hinkley, 207 pages, illust., bibliography, index, $3; "Dawn of World Railways: 1800-1850," by Nock, 179 pages, 100 pages of full-color pix, bibliography, index, $4; "New Mexico's Railroads," by Myrick, 105 pages, many pix, index, $5; all excel. cond., postpaid. Original letters signed personally by Lucius Beebe, Dellinger, Lathrop, other Railroad authors, $1 each.

Model Trading Post

JOHN NERNOFF, Jr., 9 Roslyn Drive, Glen Head, N.Y. 11545, professional rr. and trolley model hand lettering.

J. MURPHY, 733 Beaverbrook Rd., Baltimore, Md. 21212, will trade other HO gage rolling stock for a train miniature X29 boxcar in excellent cond., sells HO gage dry transfers for old-time frt. equpmt. (SSE)

L. MOORE, P.O. Box 2144, Portsmouth, Va. 23702, wants an erector Hudson loco or erector set that built same.

PAUL KENNEDY, 248 Harnstead St., Methuen, Mass. 01844, wants ¼" scale live steam loco.

J. MURRAY, Blanding Road, Rehoboth, Mass. will sell one 7½"-gage scale 4-6-4 steam loco, one 12"-gage gas-driven box cab 8-wheel diesel.

CHAS. DAVIS, 3663 McCall Blvd., Bremerton, Wash. 98310, wants OO UP 4-8-8-4 or 00 Pennsy 6-8-6 bronze boiler casting.

GEO. MAGEE, 637 Revere Rd., Merion Station, Pa. 19066, has list of used Maerklin HO for sale.

DON HILKE, 3381 South Howell, Milwaukee, Wis. 53207, buys old AF and Lionel trains. Tell details.

O'NEIL CROTEAU, Milan, N.H. 03588, will buy ¼" scale live-steamer; give details. ●

Coming Events

Jan 20, Feb. 17, March 17, monthly meeting Nat. Assn. of Timetable Collectors, 12 noon, lower level near track 6, Pennsylvania Station, N.Y. City; all invited.

April 7-8: Railroad Buffs Assn. '73 Mini-Convention, N.Y. City, parlor car; other train rides, banquet. Robt. Epstein, trip chairman, 117-14 Union Turnpike, Kew Gardens, N.Y. 11415.

April 29-May 20: Caribbean cruise and rail trip, incl. Disney World, return on Amtrak Sunset to West Coast. Contact Jim Weinberger, tour director, Pacific Coast Chap., R&LHS, Box 3552, San Francisco, Calif. 94119. ●

Pen Pals Wanted

Glen Lathrop, P.O. Box 103, Englewood, Colo. 80110, wants to hear from hobos who, like himself, has ridden freight trains.

Evelyn Gurule (15½), 1937 Sunset Street, Barstow, Calif. 92311.

Steve Hubbard (19), 16344 Comdon Road, Albion, Mich. 49224.

Nigel Ball (14), 56 Wistaston Green Rd., Crewe CW2 8QX, Cheshire, England.

Dave Linesberry (19), 1017 Don Diego, Santa Fe, N.M. 87501, wants mail from any AT&SF fan.

Pearl E. McCartney (70), 50842 Willow Oak, Houston, Texas 77018.

James A. Reed (15), 1212 E. Truman Road, Independence, Mo. 64050.

Cindy Holland, 1401 Josephine Street, Denver, Colo. 80206.

Karin Aasberg (16), Rte. 6, Box 297, Bemidji, Minn. 56601.

Joan Spangler, 6300 Monroe St., Bartonville, Ill. 61607.

Mrs. Dominga Zamudio, 1113 Gibson St., Youngstown, Ohio.

Elspeth Fleming (14), 15 Priory Close, Denham, Uxbridge, Middlesex, England, collects picture postcards.

Robert Ambrose (24), 440 Evers St., Akron, Ohio 44310, wants female pen pal interested in railroads.

Walt Gifford, 9 Kingsbury Way, Yarmouth Port, Mass. 02675, seeks help in locating John Sylvia, ex-New Haven engineer, who if living is about 90. Hogger's favorite engine was 4-6-2 No. 1342.

Mrs. Anna Templin (80), Rte. 1, St. George, Kan., deaf and lonely, needs cheer-up letters and cards.

Annie Siao (19), 27 Pedro Lopez Street, Cebu City, Philippines. ●

Abandonments of Trackage

Burlington Northern—51 miles, Little Falls to Villard, Minn.; 43.93 miles, New Raymer to Carpenter, Wyo.

Chesapeake & Ohio—2.47 miles, Onekama branch, Onekama Jct. to Onekama, Mich.; 3.62 miles, Hatch's Crossing to Northport, Mich.

Beech Creek R.R.—0.5 miles, McElhattan, Pa.

Penn Central—4.2 miles, East Brookfield to North Brookfield, Mass.; 1.6 miles, Braceville to Newton Falls, Ohio.

St. Louis Southwestern—19.13 miles, Lime City to Gatesville, Texas.

Pittsburgh, Youngstown & Ashtabula (Penn Central)—0.9 miles, Canfield branch, Youngstown, Ohio.

Total miles of abandonment authorized by ICC for Oct. 1972—127.35.

October Proposed Abandonments

Milwaukee—Calamine to Platteville, Wis.; Conover to Phelps, Wisconsin.

Penn Central—Waynesboro secondary track branch, Franklin County, Pa.; Catskill Mt. branch, Kingston to Bloomsville, N.Y.

Chicago & North Western—Keithsburg to Middle Grove, Illinois. ●

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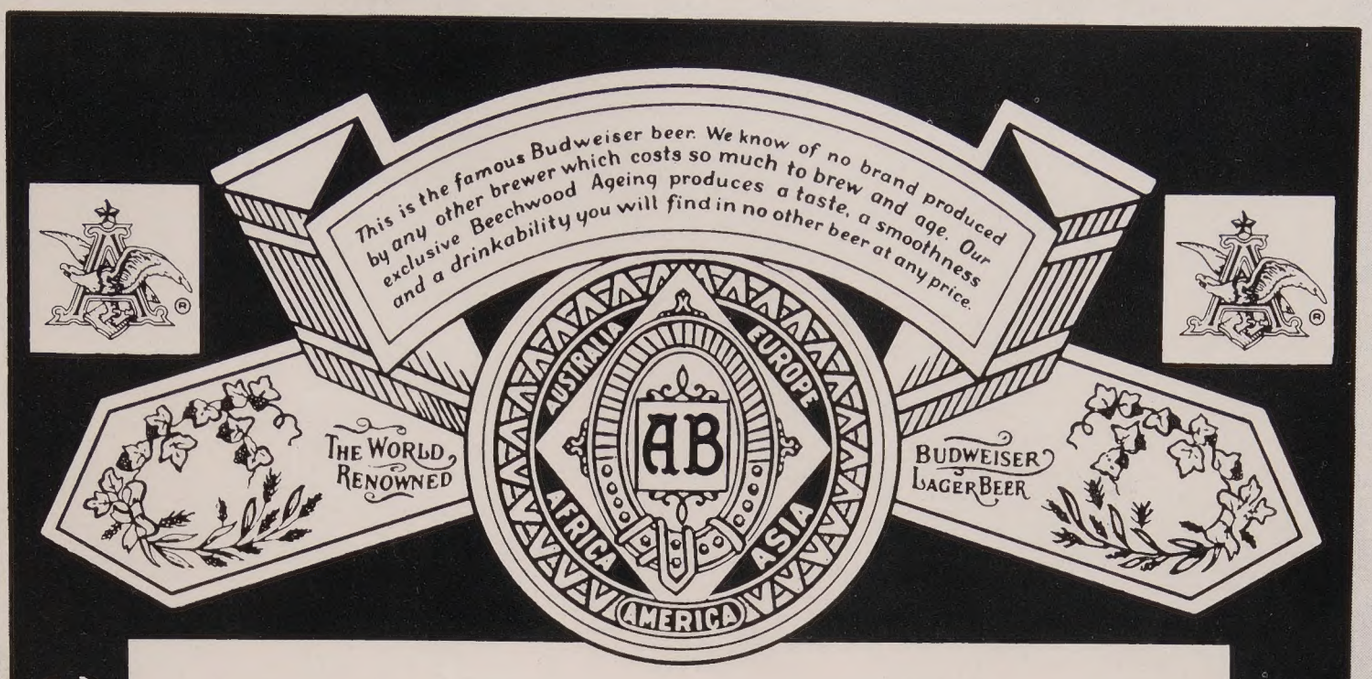
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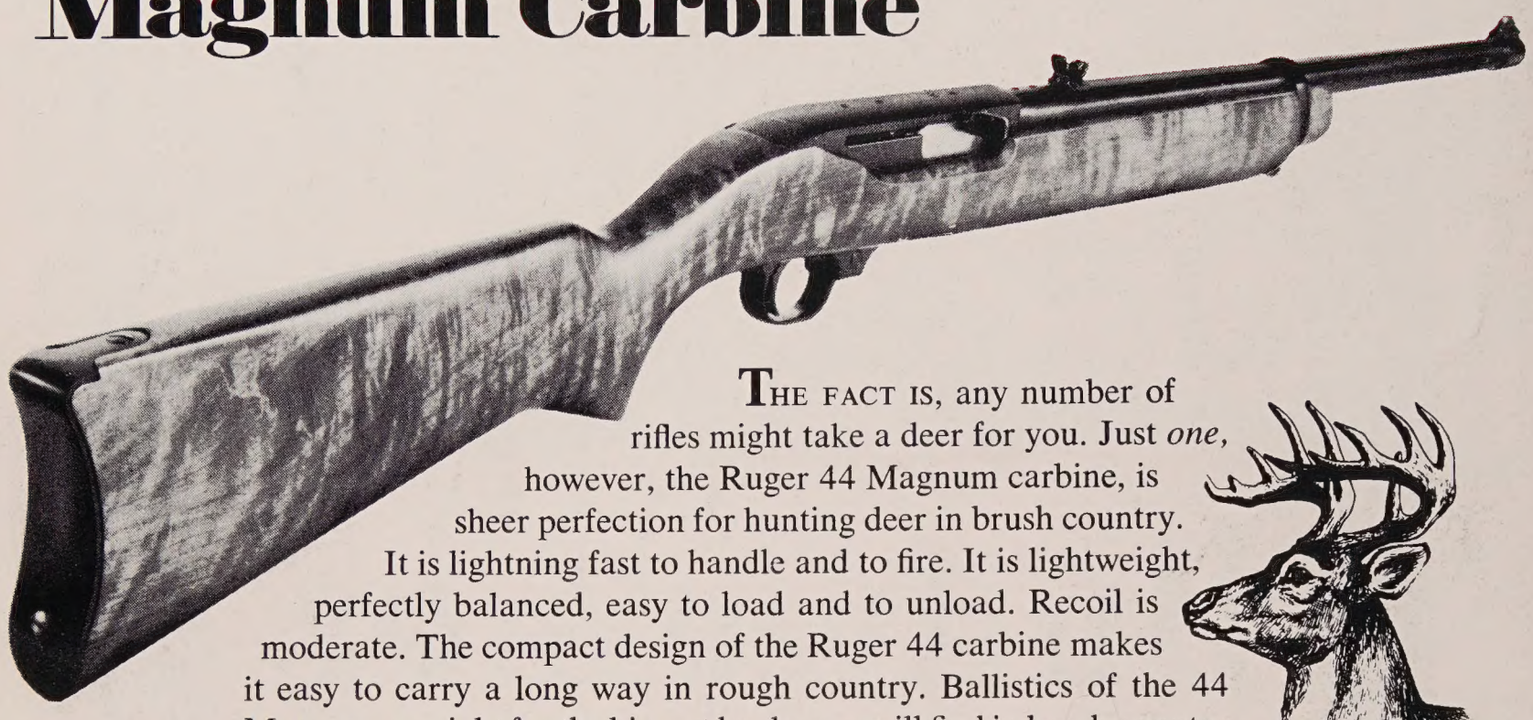

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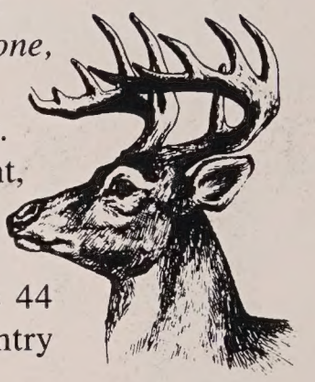

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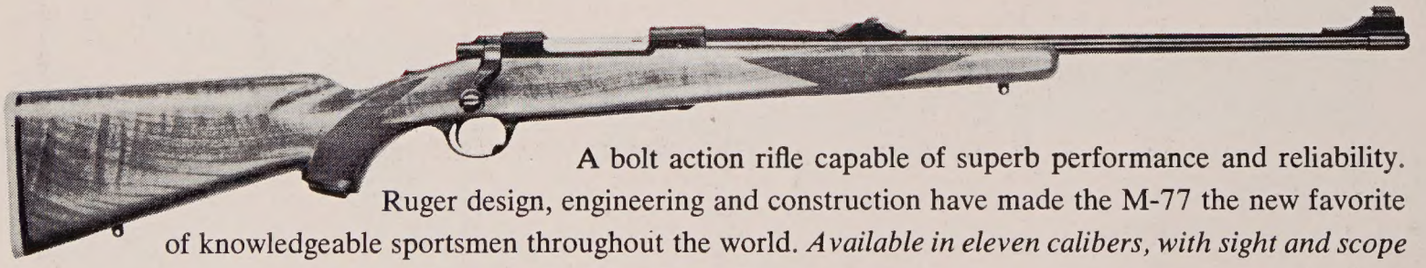

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